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Chapter 1

Introduction

Kazakhstan is a multiethnic (multinational) Central Asian country. There are more than 130 ethnic groups, most of them are from the post-Soviet countries, which moved there due to the political and economic innovation during the Soviet period. Nowadays, multi-ethnicity of the country is a one of the main political factor of contemporary Kazakhstan. Despite the fact that each ethnicity differs in social attitudes, all of them have dominant form of partnership – marital. The highest number of births was always observed in marital of family, which can be explained by the fact that extramarital births were not supported by society. Nowadays, due to modernization, social opinions of individuals have radically altered, which, brought such changes as co-habited partners or, having a baby without any form of nuclear family, especially when single women give birth due to their independence and economic stability. However, these changes were not as visible as in many European countries. Moreover, during this research, it was noted that the proportion of extramarital births decreased, which does not suggest that modernization did not come to Kazakhstan. That is why the observation of marital and extramarital fertility by ethnicity is a significant research topic due to the detailed study of each ethnic group and their social and demographic behaviors.

Due to detailed study of marital and extramarital fertility in Kazakhstan, the position of family of each ethnicity can be understood and the problems they encounter can be defined, which can be useful for political, economic and public policy for the development of the whole of Kazakhstan. Differences in recent changes in marital fertility by ethnicity are important factors for understanding the position of a family institution in demography. However, demography in Kazakhstan demands more detailed research, which can be applicable for any other political and economic purposes.

The topic of this Master thesis is the issue of marital and extramarital fertility according to ethnicity in Kazakhstan during the period 1999-2008. This thesis will provide the definitions and measurements as well as theoretical background and explanations of the above-mentioned topic. The structure of the Master thesis is as follows: the introduction and conclusion; the first chapter covers the research purposes, questions and hypothesizes, and basic concept specifications; the second chapter includes history of ethnic movement, general overview of

each selected ethnicity and their social attitudes, the third chapter concerns the social policy in Kazakhstan; the fourth chapter examined the trends of marital and extramarital fertility which includes general patterns of each ethnicity in their titular country, the trends of marital fertility in Kazakhstan, age-specific profiles, the mean age of childbearing and the proportion of extramarital fertility in Kazakhstan.

1.1 Research purposes

The purpose of the research was to make a detailed investigation in trends of marital and extramarital fertility in Kazakhstan according to ethnicity during the period 1999-2008. The main significant features in the research are the following:-

Firstly, in this decade the situation of increasing trends of fertility rates are characterized by two main reasons: the period of stabilization of the economy of Kazakhstan after the collapse of the Soviet Union and the period when the "wave of the children of the 1980s" children grew up and reached their peak of their reproduction ages. Thus, the necessity arose to examine the shares in marital and extramarital fertility of each selected ethnic group.

Secondly, socio-cultural attitudes in the country are very important for the examination of fertility trends for ethnic groups. For this purpose three types will be considered: traditional, non-traditional and mixed-traditional.

The research questions were derived in order to support the purpose of the research. The questions will be followed by the research hypotheses.

1.2 Research questions

The following research questions will be examined in the given Master thesis:

1. What changes took place in the trends of marital and extramarital fertility in Kazakhstan in both urban and rural areas during the considered period from 1999 to 2008?
2. What were shares in marital and extramarital fertility among ethnic groups in Kazakhstan during the period1999-2008?
3. In the given study what types of ethnicity changed more during the period 1999-2008: traditional or non traditional?
4. What were the intensities in marital fertility by age structure of each ethnicity?
5. What were the differences in marital and extramarital fertility between the ethnicities?
6. What were the reasons behind the changing trends of marital and extramarital fertility according to ethnicity in Kazakhstan during the period 1999-2008?

1.3 Research hypothesizes

The research hypotheses are:

1. The levels of marital fertility in Kazakhstan decreased over time due to co-habitation partnerships becoming more popular in urban areas, because urban areas are usually more modern than the rural one.
2. The shares in marital fertility decreased among ethnic groups due to the increasing numbers of extramarital births in Kazakhstan during the period 1999-2008.
3. Traditional ethnic groups became more modern, and non-traditional showed stable trends in marital fertility during the considered period.
4. More older aged married women gave births than younger aged due to the postponement of childbearing.
5. The differences in marital fertility of each ethnicity were not high while the differences in the number of extramarital births were most likely caused by to the stabilization of the economy and policy in Kazakhstan during the considered period.
6. The reasons for the changing trends of marital and extramarital fertility according to ethnicity depended on economic development and political stability in Kazakhstan during the period 1999-2008.

Chapter 2

1.1 Basic concepts specifications

Kazakhstan, as many other post-Soviet countries, has experienced political, socio-economic and cultural transformation during the last two decades. Changes in the political and economic spheres resulted in changing demographic attitudes in all post-Soviet countries. For example, Kazakhstan as well as Russia, Ukraine and Uzbekistan showed a decreasing trend of total fertility rate from 1988 to 1999. Nowadays discussion about fertility decline is easier than to explain increasing fertility, because European countries showed the same declining trends much earlier, which make it difficult to compare them with post-Soviet environment. The standards of living in European developed countries are much higher than the living standards in the majority of developing countries of the former USSR. That is why the theories of these countries must be considered first.

The debate in fertility research related to developed countries currently involves two major theoretical perspectives: those that focus on *ideational* forces and those that focus on economic forces (Billigsley 2009). Lesthaeghe and van de Kaa's (1986) the Second Demographic Transition leads the ideational literature. Lesthaeghe and Surkyn (2004) argue that a desire for self-actualization has become predominant and was fuelled by three revolutions: 1) a contraceptive revolution, which permits postponement of childbearing; 2) a sexual revolution, which broke the boundaries that kept sexual activity within marriage; and 3) a gender revolution, which allowed women to no longer be subservient to men or biology. All three of these revolutions combined re-oriented values and were said to occur "during the peak years of economic growth". The Second Demographic Transition theory dictates that families will gradually become smaller due to greater individualism and post-materialism, which are associated with increased urbanization and post-industrialization (Lesthaeghe and Surkyn 2004 in Billigsley 2009).

Most prominent in the economic discussion is Becker's (1960, 1981; Hotz et al. 1997 in Billigsley 2009) micro-economic theory of the family. The economic theory of fertility can be summarized as focusing on the costs of children, which are mediated by household income. Costs are considered both directly, in which the benefits of a child are weighed against the

costs, and indirectly, which include costs related to lost opportunities. Not surprisingly, widespread economic deterioration during the transition from communism encouraged an intuition that the economic crisis might be related to declining fertility in the region. Indeed, researchers have paid explicit tribute to the transition experience by directly linking the post-communist transition and the correlated economic crisis to the decline in fertility. Cornia and Paniccia` (1998) found a relationship between economic conditions, as well as family related services and policies, and fertility for the early years of the transition. Their results confirm the importance of the loss of resources that was brought about by structural change. The UN Economic Commission (2000) for Europe found that the decline in income put downward pressure on fertility for ten post-communist countries from 1989 to 1998. (Billigsley 2009)

Other researchers focused on explanations related specifically to the transition from communism to capitalism. Sobotka (2002) argues that the ‘‘socialist greenhouse,’’ which encompasses a broad range of socialist institutions from the labour market to family/work conciliation policies, artificially kept fertility rates high during the decades in which they would have declined, as in the case of Western Europe.

Another valuable contribution by Frejka (2008) is his discussion of the ambiguity of the economic crisis explanation. He claims that ‘‘by default, economic determinants were understood to fall within the ‘crisis’ category’’ (Billigsley 2009).

A recent theoretical addition to the debate over low fertility rates, which bridges the literature on post-communist demographic studies and research on lowest-low fertility in Europe, is the Kohler et al (2002) study. They pooled European and formerly communist countries that have entered lowest-low fertility and found evidence of a ‘‘postponement transition’’ (PPT). At the time of their analysis, 3 countries in Southern Europe, 5 in Central and Eastern European and 6 in the Former Soviet Unions had lowest-low fertility levels. They found this low TFR level to be due to postponement in childbearing which distorts the TFR and is a rational reaction to uncertainty originating in the labour market. Moreover, at the aggregate level, changes in the timing of childbirth and lower quantum were found to be reinforcing, due to feedback effects and institutional incentives (Billigsley 2009).

To summarize these theories and explanations it would be better to divide them into the following symptoms:- first, based on changes of socio-culture attitudes is the Second Demographic Transition, second, based on education or career of women is Postponement Transition, and finally, the third one, based on dependence of the economic situation or external implementations to stopping fertility, is an economic crisis.

Recent trends in European countries’ changes in marital behaviors have been presented by Hopflinger (1991a), Roussel (1989), and Hoffmann-Nowotny (1987). They showed the most important and comprehensive reviews of these developments. Haskey (1993) summarized trends in the formation and dissolution of units in several countries of Europe. He states that these changes have perhaps resulted from a change in attitudes to relationships, both to marriage and cohabitation. According to Haskey (1993, p. 211-215 in Kuijsten A, 1995, p. 59), around 1970, a turning point occurred in both the timing and prevalence of marriage in most European countries. The major cases are: 1) the emerge of cohabiting unions; 2) the

reaching of marriageable age by the first generations born after the War; 3) changing aspirations concerning family size and lifestyle; and 4) changing economic circumstances of the countries of Europe.

Regarding the cohabitation partnership, it is necessary to look at the European countries also, and analyze the situation in general. According to Haskey (1993), on a cohort basis, a majority of men and women cohabit today before marriage, however, on a period basis, proportions of young people in consensual unions are still relatively modest, except in the Scandinavian countries, and of course proportions cohabiting among all unions are still smaller. Basically, because of these growing proportions of cohabitees before marriage and in between marriages, the rates of childbearing outside marriage have increased in most European countries. (Kuijsten 1995, p. 63-64).

According to Billari F. C. and Philipov D. (2004) the interplay between educational careers and the transition to motherhood is formed on the one hand by relatively rigid institutional factors (i.e., the welfare regime of a society), as well as by specific policies (i.e., regulations on public spending in education and on maternal leave for students – that is to say, factors that change more rapidly than institutions). On the other hand, this interplay is shaped by long-term cultural differences that pervade heterogeneous areas such as Western Europe and that have deep historical roots (i.e., norms on the separation of life course domains), as well as by ideational factors that are likely to change more quickly on the historical time scale. All such factors are important in determining actual differences; although each of the four types actually refers to different scholarly traditions (Furstenberg, 2002; Billari, 2004a, 2004b in Billari and Philipov).

All -the above discussed theories and explanations relate to fertility decline trends, which the most likely to explain the decline trends of total fertility rate from 1988 to 1999. However, debate about increasing fertility trends, which were observed in Kazakhstan from 1999 to 2008, should consider political implementations to augment the natural increase of population. However, some discussions were explained by the Kazakhstani historian A. Alexeenko (2004), who connected these increasing trends of absolute number of births and total fertility rate not with the economic welfare of the country but as a result of those who were born during the second demographic wave (the late 1970s – 1980s) reaching their reproductive ages.

However, during the study we examined that hypothesis such as "the greater the increase of the economy – the lower the decrease of fertility" is not suitable for reproductive behavior of population of Kazakhstan because that population is a family oriented one.

On the other hand, it is important to mention that the theory of Postponement Transition will be much closer to marriage behavior in Kazakhstan due to the education and -career of both sexes in Kazakhstan.

Regarding the ethnical differentiations in Kazakhstan, during the study period the fertility trends of each ethnicity distinguished from each other. However, each tendency tracked similarity – upward. None of them showed a decreasing trend from 1999 to 2006. Thus, it can be noted that non-traditional society as well as the traditional one waited for the best time for

childbearing, and only after the economic growth and political stabilization the fertility lever increased in the country. Such behavior more resemble to the symptoms of the theory based on dependence of the economic situation or external implementations to stopping fertility, is an economic crisis.

Chapter 3

Social-cultural background

3.1 History of ethnic movement

The history of ethnic movement of Kazakhstan began around the 1870s up to1917, when in pre-revolutionary oriental literature materials about the different sides of life of the multinational population of Kazakhstan were accumulated: about its ethnical composition, population size, migration of peasantry from European Russia, about its cities, economy, the history of joining Russia and its administration. However, political and economical history, physical geography of the region, fashion, and folklore were examined better than its social history, ethnical and numerical structure, and the class struggle. On the other hand, before the October revolution, Kazakhstan and Central Asia were studied separately (Bekhmahanova 1986).

The reasons of migratory movements were one of the important topics of pre-revolutionary historiography. The significant point of migratory movements was the arrangements about transformation from nomadic kind of life to agricultural one. However, other historians, as A.I. Vasilchikov (1967), concluded that the migratory movements from European Russia were the result of discrepancy of population development and productive forces. Also A.I. Vasilchikov (Vasilchikov 1967 in Bekhmahanova 1986) examined, the movement is a "means for gradual equalization of allotment and right placement of population".

According to Bekmakhanova N.E. (1986), along with the labor force the major migratory flows were also military personnel, especially in the 1870s. Thus, from Siberian Cossack army was created Semirechensk (Zhetisu) Cossack army, later in that army was included peasants. (Bekhmahanova 1986).

Russians and Ukrainians during the 1870s constituted 8.25 % of the whole population of Kazakhstan (and Kyrgyzstan) (245,9 thousands of people). By 1897 the number of Russians increased up to 539,7 thousands of people, it means 10,94 % and 93,2 thousands of Ukrainian population, their specific weight reached to 1.89 %. The reason was not only in the large amount of migrants to Kazakhstan, the significant point was in natural increase – their number

of children per women was relatively higher than among the local population (Bekhmahanova 1986).

Kazakhs during 1870s constituted 70 % of the whole population of Kazakhstan. From 1879 to 1897 the specific weight decreased from 73.38 % down to 67.66 %. The reasons are: decrease in population size due to slower natural population growth, and secondly, the large number of migrants from European Russia (Bekhmahanova 1986).

At the same time the other ethnic groups in Kazakhstan were about 3 % of the whole population of Kazakhstan: Tatars, Mordvas, Bashkirs, Chuvashs, Mishars, Jews, Uzbeks, Turkmens, Karakalpaks, Tadjiks, Kalmyks, Poles, expatriates from Eastern Europe and Central Asia, their number was 302 639 people (Bekhmahanova 1986).

In the beginning of the 1930s there was famine in Kazakhstan, which was crucial for the whole population of that country; the population size became closer to the number registered in the previous census which included the migrants not only from the Soviet countries, but also from Germany, Poland, - and other territories. The reason for migration waves from the above mentioned countries was that Kazakhstan was accessible, especially for the injured and displaced people during and after the Second World War. That is why the number of population size of Kazakhstan increased up to 7.7 % (Masanov et al. 2001).

Table 1 shows the ethnic structure of the population of Kazakhstan in 1939 and 1959. According to Masanov et al. (2001) the higher percentage of Russians (41.2% in 1939 and 42.7 % in 1956) than Kazakhs (36.4 % in 1939 and 30.0% in 1956) could be explained by two reasons: increasing number of Russian immigrants to Kazakhstan and decreasing number of Kazakhs. The share of Kazakhs in 1959 decreased down to 30 %. However, he does not give the reasons to explain such a decrease, which could be connected with a natural decrease of the Kazakhs population.

The most significant period for the ethnical formation of Kazakhstan was economic and political program called “Development of virgin and long-fallow lands” (1951-1960). During the realization of that program the number of immigrants in Kazakhstan increased from 6394,6 thousands of people in 1939 up to 9294,7 thousands of people in 1956 (see Table 1). Most of them were Russians, Ukrainians, and Belarusians. However, later the number of Ukrainians and Belarusians decreased due to the assimilation processes, thus, many of them registered as Russians (Masanov et al. 2001).

So, from 1960 migration waves in Kazakhstan were replaced by the natural growth of the population, i .e. migration was no longer the factor and instead it was the natural, biological reproduction of the existing population. The first main reason of such a population change in that period in Kazakhstan was due to increased fertility level and mortality decline related to the development of health care system and other socio-economic factors. The second reason explained the increased number of births was people who came to develop the virgin and long-fallow land in Kazakhstan were young reaching their “peak” of their reproductive age. Because of weak ethnic migration flows during the period of 1960-1989 the population did not change ethnic structure and the period will not be considered as important for ethnic change in Kazakhstan.

However, from the beginning of the independent sovereignty (1990) of Kazakhstan, the number of migrants began to decrease due to the financial and political crisis in the country. Almost all Soviet countries experienced such a crisis, people moved to their historical lands, especially most of the German ethnicity returned to Germany. Such a situation was not only due to the political and economic crisis, for instance Germany announced the returning program and introduced different facilities for repatriates. That is why the share of Uzbeks came to rise and in the research paper Uzbeks represent one of the dominant ethnicity in Kazakhstan. In addition, Uzbeks did not belong to the emigrant ethnicities, controversially their number increased due to biological reproduction and immigration into Kazakhstan. Nowadays, 2.5 % of the Kazakhstan population is of Uzbek ethnicity, and it is likely that their number is going to increase in Kazakhstan. It is also probable that other ethnicities from Central Asian countries will come due to the political and social circumstances in their countries, because in recent times Kazakhstan has become a more economically and politically stable country when compared to other Central Asian ones.

Table 1 – The number of population of Kazakhstan in 1939 and 1956

	1939		1956	
Ethnicity/Indicators	Number of population in thousands	%	Number of population in thousands	%
All ethnic groups	6,394,6	100	9294,7	100
Kazakhs	2,327,6	36.4	2787,3	30
Russians	2,635,6	41.2	3972,0	42.7
Ukrainians	676,8	10.6	761,4	8.2
Germans	93,6	1.5	659,7	7.1
Others	661,0	10.3	1114,3	12

Source: Masanov N.E., Abylhozhyn Z.B., Erofeeva I.B., Alexeenko A.N., Baratova G.S., History of Kazakhstan: people and cultures. Almaty, 2001.

Note: The table was constructed as the same from the source.

3.2 General overview of each ethnicity

Kazakhs

The Kazakh ethnic group was formed from the different ancient tribes that populated the territory of contemporary Kazakhstan. They were Saks (Skiffs), Uisuns, Kangyus, Tyurks (Tyurgeshs), Tele, Karluks, Kimaks, Oguzs, Kipchaks, etc. In the middle of the 15th century the Kazakh khanate was created, which was getting more and more power from century to century. Until the 20th century Kazakh ethnicity was divided into three zhuzs: the Oldest, the Middle and the Youngest. Each of them consisted from different, however, related tribes, also each zhuz represented one administrative part of the whole Kazakh khanate and owned the land. The Kazakh language belongs to the Northern-West (or Kipchak) Turkish group of

languages. Most of them profess Sunni-Islam. In the end of the 1980s the number of Kazakhs worldwide was at about 10 million, most of them lived in the USSR (8 135 818 people), the main part (6 534 616 people) lived in Kazakhstan (Masanov et al. 2001).

Russians

The Russian language is a part of the western Slavic language family. Most of the Russian people profess Christian Orthodoxy. Regarding their origin, they belong to western Slavic tribes, who in the second half of the first millennium BC occupied the territory of Ukraine, Belorussia and European part of the Russian Federation. In the late 1980s the number of Russians was about 147 million. Significant groups of Russians began to appear in Kazakhstan in the 18th century. By 1870 their number reached 2,459,000 people, and by the census in 1897 – 5,397,000 people (Masanov et al. 2001).

Ukrainians

As well as Russians and Belarusians, Ukrainians rank among Western Slavs. The Ukrainian language belongs to the Indo-European languages of the western Slavic language family. Most of the Ukrainian people profess Christian Orthodoxy. The census of 1989 fixed in the USSR 44,186,006 Ukrainians. A significant number of Ukrainians lived in each country of USSR. In Kazakhstan their number was 896 240 people. Ukrainians have lived in Kazakhstan for a long time. According to the census of 1897, their number was 86,7 thousands of people and in the census of 1926 their number reached 860 201 people. The majority lived and lives in the Northern part of Kazakhstan (Masanov et al. 2001).

Uzbeks

The Uzbek language is a part of the Turkic group of languages. The informal Uzbek language distinguishes from standard language because of the multi-dialectal composition and sharp differentiations of each dialect. Almost all of Uzbeks profess Sunni Islam. Ancient ancestors were Sogdys, Khorezms, Bactrians, Fergans, and Scythian-Massagets tribes. All of these folks were of Iranian lingual family. The census of 1989 in the USSR were 16 697 825 Uzbeks, the majority lived in Uzbekistan; a big number of Uzbeks lived also in Afghanistan (about 1.5 million people). After the delimitation of Central Asia in 1924 a big number of Uzbeks went to Kazakhstan, especially to Syrdariya's guberniya (96 %) and later Uzbeks stayed in the Southern part of Kazakhstan (Chimkent and Dzhambul oblasts (regions)) (Masanov et al. 2001).

3.3 Social attitudes

This research considers Kazakhs (titular), Russians, Ukrainians and Uzbeks, which are the most sizable ethnicities in Kazakhstan during the 1999-2008. To clarify the social aspects, the ethnic groups are divided into 3 types: traditional, non-traditional and mixed traditional. Traditional ethnicity is represented by Uzbeks, non-traditional by Russians and Ukrainians,

and Kazakh ethnicity is referred as mixed traditional. For instance, Kazakhs living in Southern and Western Kazakhstan are more traditional than those being in the Northern and the Eastern parts. The above mentioned typology is significant for understanding the differences between ethnic groups in the paper.

Religion is also an important factor, which could affect the fertility or reproductive behavior of the society. Being a multiethnic country means being a multireligious one also. In Kazakhstan there are 45 religious confessions (www.akorda.ru), among them the most popular religions are Islam and Christianity. In terms of examined ethnicities Kazakhs and Uzbeks are affiliated to Sunni Muslim and Russians and Ukrainians to Orthodox Christianity. According to the Muslim religion, a man can have more than one wife, however, in Kazakhstan such behavior almost does not exist, only a small number of women are a second and less a third wife. According to the Law of Family and Marriage of Kazakhstan, a man can be married only to one bride, not multi-wives. However, the multi-wives families are not prohibited in Muslim society. To clarify the situation the women who are in legal marriages will be defined as "legal" and those who are not - "illegal wives". So, legal wives usually have children in one year after a wedding, whereas illegal ones later than one year, but the number is hardly noticeably in Kazakhstan.

Regarding Christianity, it prohibits such behavior as multi-wives and is strictly monogamous. That is why illegal wives among Christian ethnic groups do not exist in Kazakhstan, except so called "lovers", who usually do not have children and these relationships are not permanent.

Simultaneously, along with the religions of ethnicity which were described above, language is also an important factor, because language is a tool of relationship not only between people in general, but also between members of family which can be fundamental for choosing ethnicity of a child. For example, a mixed ethnic family would usually speak both their languages, or sometimes only the dominant language and as a result, a child (or children) from that family also speaks a dominant language, moreover the language defines the ethnicity he associates himself/herself with. However, before a child becomes of the age of 16 (which is full legal age when a person begins to bear responsibilities for his/her actions), his/her ethnicity will be the same as that of his/her mother with the possibility to change it later.

In Kazakhstan mixed ethnic marriages appeared quite frequently. For example, in 1999 the percentage of Kazakh bridegrooms who married other ethnicity was 12 %, in 2007 it increased up to 19 %, and Uzbek – from 1 % up to 3 %, whereas the percentage of Russian bridegrooms who married other ethnicity decreased from 32 % down to 29 %, and Ukrainian – from 15 % down to 12 %. (see Table 1)

At the same time the percentage of brides who married people from the other ethnicity also increased among Kazakhs: in 1999 it was 8 % and in 2007 – 15 % and Uzbeks: in 1999 it was 1 % and in 2007 – 2 %, whereas the percentage of brides who married the other ethnicity decreased among Russians: in 1999 it was 41 % and in 2007 – 37 % and Ukrainians: in 1999 it was 14 % and in 2007 – 11 %.

Table 1 – The percentage of mixed ethnic marriages in Kazakhstan, in 1999, 2006, 2007

	Men			Women		
	1999	2006	2007	1999	2006	2007
Kazakhs	12	19	19	8	16	15
Russians	32	30	29	41	37	37
Ukrainians	15	12	12	14	11	11
Uzbeks	1	3	3	1	2	2
Others	39	37	38	36	34	35
All	100	100	100	100	100	100

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

So, the languages which are frequently used in Kazakhstan are Kazakh and Russian, where Kazakh is a state and Russian is an official international language.

Despite the fact that some people originally belong to one ethnicity, they registered themselves as another because of the language they speak. For example, the professor of Arizona State University V. Agadjanian did the research through a survey, where he divided Kazakh population into two groups: Russian-Kazakhs and Kazakh-Kazakhs, where Russian-Kazakhs were those who spoke Russian and Kazakh-Kazakhs who spoke the Kazakh language. Such division could be useful for the studying in depth the types of Kazakh ethnicity or regional differentiations. Moreover, V. Agadjanian aggregated Russian, Ukrainian, Belorussian and other European ethnic groups in group of "European" (Agadjanian 1999), which could be confusing for examining separate ethnicities. However, such observations of V. Agadjanian highlight the language importance in choosing ethnicity in Kazakhstan.

Chapter 4

4.1 Social policy concerning fertility in Kazakhstan

Kazakhstan has a line of social policy, which concerns family policy. However, it is important to firstly mention the main political documents of Kazakhstan such as the strategy of the president of Kazakhstan N.Nazarbayez "Kazakhstan – 2030". It is mentioned there that "Prosperity, security and the increase of the well-being of all Kazakhstani people" is one of the priorities. Another priority of national security is strong demographic and migration policies. If Kazakhstan's government is still indifferent to these problems, then Kazakhstan will face the situation of a "demographic cross" when the size of the population decreases not only because of outside migration, but also in a natural way… This tendency should be stopped immediately. The safety of a mother and a child must be a top priority of the country, within the healthcare system and in general society. It can be offered to impose a tax on those who do not want to have children. This tax will help extended families. Some new ways of supporting the families, pregnant women and their children must be found at the local level. If Kazakhstan wants to follow high moral standards, then spouses must be very attentive and responsible for their children and family".

Thus, having such a purposeful strategy in the population policy, every year the president sends official messages for achieving the annual goals, which can help to reach the purposes of this strategy. So, regarding the policy in the field of demography, in 2000 the Concept of state demographic and migration policy of the Republic of Kazakhstan was adopted. The following goals are mentioned there (Esimova 2006):

1. To overcome the negative tendencies in demographical processes.

2. To prevent depopulation.

3. To ensure quantitative and qualitative growth of the population that corresponds to the long-term developmental strategy of Kazakhstan.

In the Program of the demographic development of Kazakhstan for 2001-2005 it is stated that the decrease in the birth level, that started in the last decades of the last century, was caused by the side-effects of the transitional period. The main objective described in the

Program is to stabilize the birth level and to ensure its' growth which will help to boost the reproduction of population. It is also highlighted that women who live in rural areas can contribute to the demographic development of Kazakhstan the most. They must be supported by the government and the society because of some economic limitations. The expected results mentioned in the Program are the following: the growth of population up to 16 million people by 2010 and up to 20 million by 2030.

In 2004 "The Law on reproductive rights and their guarantee" was issued. In article 10 "The right of a free reproductive choice" the following is stated: the citizens have the right to decide freely how many children they would like to have, when they would like to have them, in or outside of a legal marriage, the intervals between the children necessary to ensure mother and child's state of health. The following right are guaranteed:

- infertility treatment;
- artificial insemination;
- fetus implantation;
- use or non-use of contraception;
- artificial termination of pregnancy.

The Law also defines such notions as a surrogate mother, the contract between a surrogate mother and people who want to have a child, as well as the right and contractual obligations of both parties.

According to the addendum to the "Labor Law of the Republic of Kazakhstan" which was passed in 2004, the following stipulations were added:

- the employer is not allowed to terminate the individual working contract with pregnant women who have children up to one and a half years old;
- working women with children up to one and a half years old can have additional breaks of not less than 30 minutes for feeding a child every 3 hours of work. Such breaks are included into the working hours and must be paid.

Starting from 2003 a flat child benefit was set at 13080 tenge. Mothers of many children, who were awarded special titles and received governmental decorations, are entitled to a special governmental benefit of 1747 tenge. According to the Pension Law of the republic of Kazakhstan, women who have 5 and more children whom they brought up till the age of 8, can retire at the age of 53 (Esimova 2006).

It can be concluded that legal and political foundations for the pro-natal policy of the country have not been supported by the direct actions and measures from the governmental side. It should be noted that the repatriates are hoped for contributing to the improvement of the demographic situation in the country. The majority of repatriates are Uzbeks, Tajiks, Mongols whose reproductive behavior is characterized by the tendency of having many children.

Chapter 5

Legislation, data and methods

5.1 Registration of births

Registration of births is a significant procedure in the life of everyone, because it is impossible to get social benefits, to submit the required documents to a kindergarten or school, to go on holiday, to register a child, and later - to get an identity card and passport without a birth certificate. On the other hand, it is highly important for researchers or statisticians to analyze the data in details. Registration of births in Kazakhstan takes place at a local Civil Acts Register Office (ЗАГС (ZAGS) – Запись об Актах Гражданского Состояния), which relates to the Department of Justice of the Ministry of Justice of the Republic of Kazakhstan.

Registration of births consists of two steps that provide detailed information on getting data for statistical offices.

The first step is when a child was registered in a maternity hospital, where parents take a medical certificate of birth, which includes the following information about the mother and the father:

Child's Details:

1. The time, date and place of the birth.
2. Gender.
3. Birth order.
4. Weight, maturity and length.

Mother's Details:

1. The name(s) and surname of the mother.
2. Place of residence.
3. The date of birth.
4. Nationality (ethnicity).
5. Education (basic (начальное), secondary (среднее), vocational (средне-специальное), university (незаконченное – unfinished), university (высшее – finished)).
6. Marital status of a mother at the time of birth.

The second step is the registration of a child at Civil Acts Register Office (ЗАГС – Запись об Актах Гражданского Состояния) and includes the following information about a child and a mother:

Child's Details:

1. Time, date and place of birth.
2. Gender.
3. Nationality or ethnicity.

Mother's Details:

1. Name(s) and surname of mother and father.
2. Place of residence of mother and father.
3. The mother's and father's date of birth.
4. Nationality of mother and father.

According to the Law "About Marriage and Family" of the Republic of Kazakhstan the application for registration of birth must be filled at a local office of Civil Acts Register (ZAGS) during the two months after that a child was born. The local office of Civil Acts Register analyzed that the most important reasons of the late registration are the neglect of the child's parents to obtain the document, the lack of identity documents of parents or a parent, or of a child with a woman, who is unmarried. In this case the woman hopes to get married, and after that to formalize the birth of a child (www.minjust.kz) (see the Application 4 and 5).

5.2 Data processing

All these details are forwarded from the local ZAGS to the local Statistical Office. In order to explain the data availability in Kazakhstan, the system of administrative division of Kazakhstan must be described.

Administrative division of Kazakhstan consists of auyl (village), raion (district), oblast (region). It must be mentioned that there are 14 regions and 2 municipal cities in Kazakhstan (Astana and Almaty) (www.minjust.kz).

As well as at the Ministry of Justice, the data processing at the Agency of Statistical office of the Republic of Kazakhstan starts from local offices: for rural – from auyl (village), and for urban – from town. The auyl sends their data to the raion (district), where data are collected by one of the branches of the Agency of Statistical office – the Otdel (Bureau) of Statistics. All Bureau of Statistics forward the data to the regional (oblast) department of Statistics, and then the regional department of Statistics in its' turn sends the data to the main Agency of Statistical Office. The data processing for urban area is shorter: it starts from town (otdel (Bureau) of Statistics), they send the data to the oblast, and the regional Department of Statistics collects information from all districts and resends it to the Agency of Statistics of the Republic of Kazakhstan.

5.3 Data quality and unavailability

Data for this research were sourced from published data in the public domain – the Demographic Yearbook and unpublished data – special output from the Agency of Statistics of the Republic of Kazakhstan. Special output is the main data for this research. The information and data on marital fertility were taken according to the following parameters:

period:	1999-2008 and 1999-2006;
population:	gender: women;
age:	15-49;
births by status:	marital and extramarital;
gender of birth:	male and female;
ethnicity:	Kazakhs, Russians, Ukrainians, Uzbeks, Uigurs, Tatars, Germans and others;
place of residence:	urban and rural.

All these data in terms of births excluded stillbirths, the research is based on the number of live births. The ethnic groups which are most sizable – Kazakhs (53%), Russians (30%), Ukrainian (3.7), Uzbek (2.5%) were chosen from that data set.

Despite the fact that the period in consideration is 1999-2008, some calculations were made only for 1999-2006 because of the lack of data, especially for woman population by ethnicity and age structure. That is why such measurements as age-specific fertility rate by ethnicity were done only for the 1999-2006.

Regarding the quality of data, there could be some errors, especially in the rural offices. However, the errors are not significant.

Despite the fact that all details of births are being forwarded to the Agency of Statistical Office, some data is not available there. One of the suggested reasons could be incomplete information from a certificate or other sources.

Simultaneously, some numbers for this research were taken from the international database of the World Bank (www.worldbank.org) such as total fertility rate from 1965 to 2007 in order to describe the historical trends in Kazakhstan, Russia, Ukraine and Uzbekistan. Although the international database has one of the richest data collection, the lack of the numbers in some years is not substantial and the quality is quite reliable.

According to the United States of America Census Bureau (2006), data must possess three attributes of quality: utility – refers to the usefulness of the information for its intended users; objectivity – refers to whether information is accurate, reliable, and unbiased, and is presented in an accurate, clear, and unbiased manner; integrity – refers to the security or protection of information from unauthorized access or revision. To help apply data the best, the United States of America Census Bureau further defines utility, objectivity, and integrity in terms of fifth dimensions of data quality: relevance, accuracy, timeliness, accessibility, interpretability (ibid).

Relevance of statistical information refers to the degree to which data provide information that meets customers' needs. Accuracy refers to the difference between an estimate of a

parameter and its true value. Timeliness refers to the length of time between the reference periods of the information. Accessibility refers to the ease with which customers can identify, obtain, and use the information. Interpretability refers to the availability of documentation to aid customers in understanding and using data. This documentation typically includes: the underlying concepts; definitions; the methods used to collect, process, and analyze the data; and the limitations imposed by the methods used (United States of America Census Bureau 2006).

5.4 Definitions

To analyze the changes in trends of marital fertility according to ethnicity in Kazakhstan a line of specific demographic indicators were recorded where each of them bears its definitions. So, according to the glossary of the Population Reference Bureau and the United States Census Bureau, we used following demographic terms:

- *Total Fertility Rate (TFR)* is the average number of children that would be born alive to a woman (or group of women) during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. This rate is sometimes stated as the number of children women are having today.

- *Age-Specific Fertility Rate (ASFR)* measures the annual number of births to women of a specified age or age group per 1,000 women in that age group. Unless otherwise specified, the reference period for the age-specific fertility rates presented in World Fertility Data 2008 is the calendar year.

- *Age structure* is the distribution of a population according to age, usually by 5-year age groups.

- *Birth rate* is the average annual number of births during a year per 1,000 populations at midyear, also known as the crude birth rate.

- *Marital Fertility Rate* is the number of live births to married women per 1,000 married women ages 15-44 or 15-49 in a given year. However, in the given Master thesis Marital Fertility Rate will be done by the second kind of calculation. (see Chapter Legislation data and Measurements).

- *Mean Age at Childbearing (MACB)* is the mean age of mothers at the birth of their children if women were subject throughout their lives to the age-specific fertility rates observed in a given year.

- *Cohort* is a group of individuals born in the same calendar year or group of years. (U.S. Census Bureau)

- *Contraception* – the conscious effort of couples to regulate the number and spacing of births, also known as family planning.

- *Urbanization* is growth in the proportion of a population living in urban areas.

- *Married women of reproductive age (MWRA)* are women ages 15 to 49 (16-19) either formally married or living in union with a man (consensual unions).

- *Replacement level of fertility* is the average number of children each woman would have to bear for a population to remain the same size over the long term. Conventionally taken to be an average of 2.1 children per woman.

- *Vital registration* is the recording of vital events for legal, administrative, and statistical purposes.

On the other hand the important definitions in the given paper related to ethnicity. Which are:

- *Culture* – describes what people develop to enable them to adapt to their world, such as language, gestures, tools to enable them to survive and prosper, customs and traditions that define values and organize social interactions, religious beliefs and rituals, and dress, art, and music to make symbolic and aesthetic expressions. Culture determines the practices and beliefs that become associated with an ethnic group and provides its distinctive identity (Child Safety Services www.childsafety.qld.gov.au/).

- *Ethnicity* – belonging to a group that shares the same characteristics, such as country of origin, language, religion, ancestry and culture. Ethnicity is a matter of biological and historical fact and is not changed by the culture in which a person grows up (Child Safety Services www.childsafety.qld.gov.au/).

- *Ethnic identity* refers to a person's sense of belonging to an ethnic group. Ethnic identity is drawn from the realization that a person's thoughts, perceptions, feelings and behaviors are consistent with those of other members of the ethnic group. Ethnic identity recognizes that a person belongs to a particular group that shares not only ethnicity but common cultural practices (Child Safety Services www.childsafety.qld.gov.au/).

5.5 Measurements

According to the Law "About Marriage and Family" of the Republic of Kazakhstan, the minimum age for getting married is 16 years old. Therefore, marital fertility measurement starts from the age of 16. According to the biological ending of reproductive age of women the maximum age is 49 years old, however, in some cases we observe live births where the age was 50 or a little older. Due to the small number at age 50 and older, the maximum age of mother in the research paper was denominated as 49 and over or 49+.

Second, in the special output of data from Agency of Statistics of Republic of Kazakhstan they are the "unknown" data, related to the age-structure of mothers. In other words, the "unknown" is a number of children born without information of age of mothers. So, to distribute the "unknown" number of births we used the following formula:

$$Dx = Bx \times \frac{\sum_{16}^{49+} Bx}{\sum_{16}^{49+} B'x}$$

where:

Bx is the number of births who were born at the age *x* of mother in a given year;

$\sum B'x$ is the total number of births without "unknown" births in a given year from the age of 16 to 49 and over;

$\sum Bx$ is the total number of births with "unknown" births in a given year from the age of 16 to 49 and over;

Dx is the number of births by age including the "unknown" births at the age x (proportionally distributed) in a given year.

The basic indicator of the level of fertility is the total fertility rate (TFR), calculated by summing age-specific birth rates over all reproductive ages. It may be interpreted as the expected number of children a woman who survives to the end of the reproductive age span will have during her lifetime if she experiences the given age-specific rates (Population Reference Bureau), whereas the age-specific fertility rate (ASFR) is a number of births to women in a particular age, divided by the number of women in that age. […] So,

$$TFR = \sum_{16}^{49+} ASFR_x ,$$

However, according to the data from the Agency of Statistics of the Republic of Kazakhstan, we used the Second kind of age-specific marital fertility rate, which is distinguished by the age group of mothers:

$$ASFR_x = \frac{B_x}{{}_{mid-year}\mathrm{P}^{w}{}_{x}} , \text{ where x: 16,..49:}$$

$\mathrm{B_x}^{mar}$ is number of marital births by woman age

${}_{\text{mid-year}}\mathrm{P_x}^{w}$ is midyear population of women at age x (disregarding marital status).

It must be noted that the period of the study is related to the availability of the data: from 1999 to 2008 as in general and from 1999 to 2006 for some calculations as the age-specific fertility rates by ethnicity and the total fertility rate by ethnicity.

The mean age at childbearing is computed as the sum of age-specific fertility rates weighted by the mid-point population of each age group, divided by the sum of the age-specific rates. Mean age at childbearing (MACB) was computed as follows:

$$MACB = \frac{\sum_{a} af_a}{\sum_{a} f_a}$$

Where a is the mid-point for each age interval (17.5, 22.5, etc.) and fa is the age-specific fertility rate for women whose age corresponds to age group of which a is the mid-point. As a convention, the following one four-year age group and six five-year age groups are utilized: 16 to 19; 20 to 24; 25 to 29; 30 to 34; 35 to 39; 40 to 44; and 45 to 49.

It is necessary to note that the calculations for each ethnicity, also for urban and rural areas were made by following formulae:

1) for urban area:

$$MACB_{urban} = \frac{\sum_a af_a^{urb}}{\sum_a f_a^{urb}}$$

2) for rural area:

$$MACB_{rural} = \frac{\sum_a af_a^{rur}}{\sum_a f_a^{rur}}$$

3) and for each ethnicity:

$$MACB_{ethnicity} = \frac{\sum_a af_a^{ethn}}{\sum_a f_a^{ethn}}$$

Marital fertility is one of the significant processes among all types of fertility due to the most children are born by married women. However, some calculations for extramarital fertility were also given in this research in order to compare the situation. For example, the main calculation for extramarital fertility is the proportion, which is:

$$\frac{B^{unm}{}_x}{B^{unm}{}_x + B^{mar}{}_x} \times 100$$

where:

$B^{unm}{}_x$ is the number of births born at the age x by unmarried women in a given age and year;

$B^{mar}{}_x$ is the number of births born at the age x by married women in a given year.

All measurements were done using the classical demographic methods of fertility analysis, which include such parameters as ethnicity, type of settlements (urban-rural) and age structure.

Chapter 6

Trends in marital and extramarital fertility according to ethnicity in Kazakhstan

6.1 Fertility patterns

Kazakhstan has a lot of different ethnicities, and each of them has different fertility patterns. However, the most important similarity is that all of them show the highest number of births in marriage. That is why in the beginning of this paragraph the main focus will be on comparing fertility patterns for the country where the considered ethnicity is titular (Kazakhstan, Russia, Ukraine and Uzbekistan) before the study period and then the focus will shift to marital fertility patterns in Kazakhstan according to ethnicity and including all types of settlements during the 1999-2008.

This research paper considers Kazakhs (titular), Russians, Ukrainians and Uzbeks, which are the most sizable ethnicities in Kazakhstan during the 1999-2008. So, to clarify social aspects, the author divided ethnic groups into 3 types of society: traditional, non-traditional and mixed traditional. Traditional type includes Uzbek ethnicity, non-traditional Russian and Ukrainian, and mixed traditional - Kazakh ethnic group. Regarding the last type of society, regional differentiations of traditional type of family among Kazakh ethnicity is relatively visible. For instance, the Sothern and the Western Kazakhstan is more traditional than the Northern and the Eastern parts. This aspect is significant for understanding the differences between ethnic groups in the paper.

Let's start first with describing fertility rate of all women. One of the most frequently used indicators of fertility trend is the total fertility rate (TFR), which gives a direct measurement of the cross-sectional fertility level. So, according to the World Bank (www.worldbank.org), from 1964 to 2006 Kazakhstan, Russia, Ukraine and Uzbekistan experienced almost the similar decreasing fertility trend since 1988. In the 1980s political and economic systems were changed in the former Soviet Union. This period was called Perestroika (which is translated as restructuring). Later, this restructuring caused the collapse of the Soviet Union and every country got independence. Every country changed its' economic system from the

centrally-planned to the market economy. Consequently, this transformation resulted in a significant impact on fertility level and structure.

The total fertility rate during the Soviet period was obviously different in each examined country: fertility level was country specific, the highest in Uzbekistan and the lowest in Russia and Ukraine, whereas Kazakhstan occupied the intermediate position. The difference between Uzbekistan and Kazakhstan is considerable, while between Russia and Ukraine is almost invisible (see Figure 1).

During the Soviet period and after the collapse of the Soviet Union the downward trends or stagnation in TFR for selected countries can be observed. Kazakhstan was an exception because its population experienced two periods of upward trends: 1980-1989 and 1999-2008. The total fertility rate in Uzbekistan was almost stable at about the level of 5.67 live born children per woman till 1975 and then it decreased rapidly down to 2.36 in 2003, which means the decline of 2.40 times. At length four periods can be distinguished:

1) till 1980 almost everywhere trend was stable, excluding Uzbekistan, where already from 1975 total fertility rate decreased.

2) from 1980 to 1987, when each country experienced a slightly increasing trend, except Uzbekistan where TFR was almost stable.

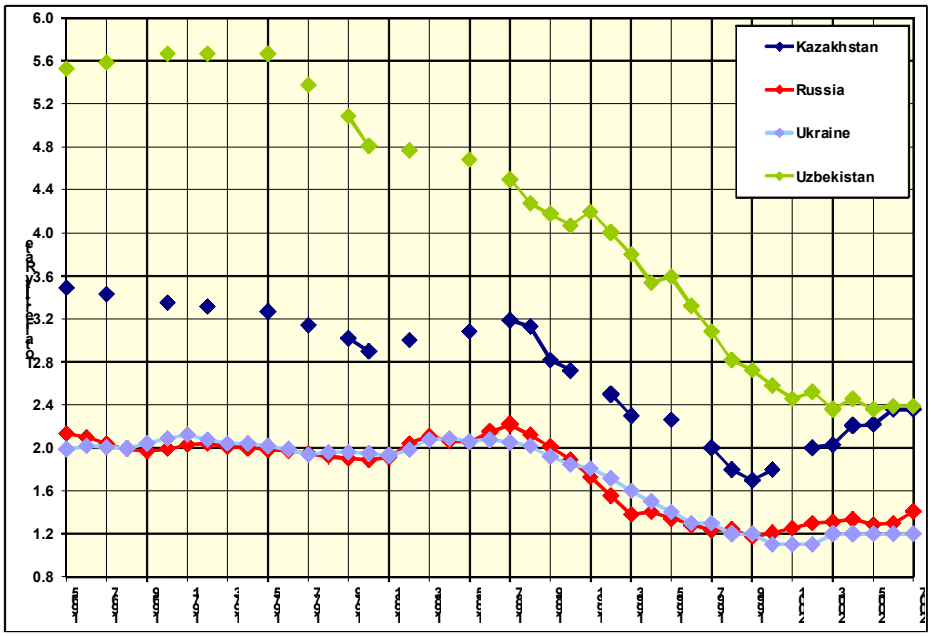
3) from 1988 to 1999 all countries showed rapidly decreasing trends.

4) from 1999 to 2008, in Russia, Ukraine and Uzbekistan the fertility level of TFR was stable, but Kazakhstan was an exception due to a rapidly increased trend resulting in the end of this period into the same TFR as in Uzbekistan.

In spite of the fact that Russia and Ukraine present almost the same tendencies, they show the small disparities of approximately 0.16. In 1987 the number of children per woman during her reproductive years was 2.22 in Russia and 2.05 in Ukraine. It means that both countries' tendencies were going down to 1.17 in Russia till 1999 and to 1.1 in Ukraine till 2000. The lowest trend fertility rate shows population decline in both countries.

To summarize, this trend of total fertility rate by each selected country according to considered ethnic groups is historical. It can be also noticed that the level and tendency of fertility in titular countries were similar to levels and tendencies inside Kazakhstan according to corresponding ethnicities. The more in depth analysis of fertility by ethnicity in Kazakhstan will be provided in the next paragraphs for the period 1999-2008.

Figure 1 - Total Fertility Rate for Kazakhstan, Russia, Ukraine and Uzbekistan from 1965 to 2007

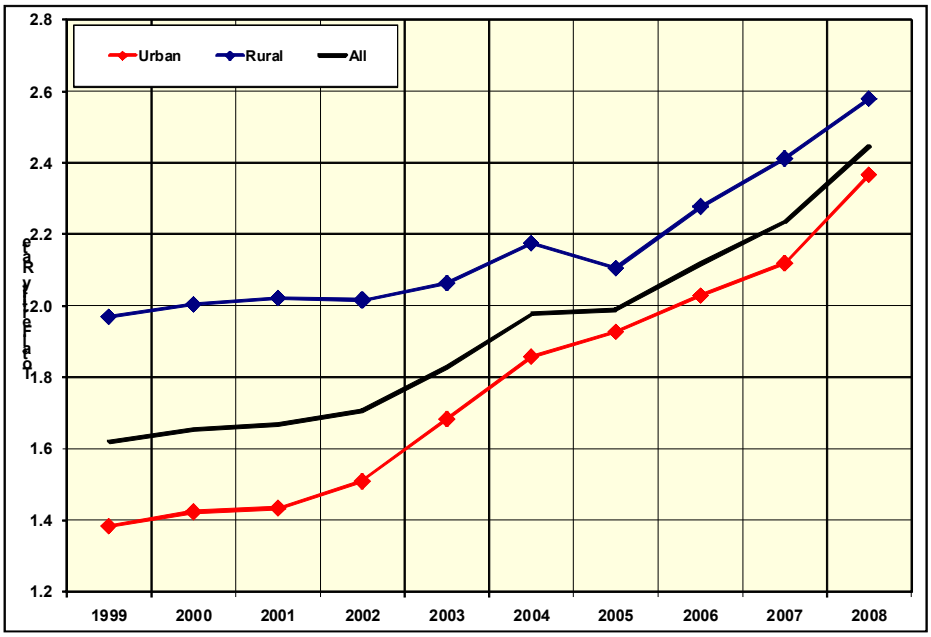


Source: The World Bank www.worldbank.org assessed on 15 December 2010

Kazakhstan, as any other country, has two types of settlement: urban and rural. Usually, total fertility rate is higher in rural area than in urban. Rural area in Kazakhstan is more traditional and almost every ethnicity that lived there showed a higher number of children than in urban area.

The overall trends of total fertility rate by types of settlement are presented in Figure 2. Annual increases are obvious, but in 2004 and 2005 there was a slight fluctuation, especially in the rural curve, which can be associated with the economic policy measures enacted in the country. In 2004 the program "Development of rural areas" was adopted by the Decree of the President of Kazakhstan, and it influenced fertility positively in the next years, because usually when such programs are being realized, the effect on fertility comes later. Firstly, because of the family planning and secondly, because of the time of pregnancy. At the same time, the gap between urban and rural fertility rates has been narrowed since 2005. It happened due to the rapid increase of TFR in urban area.

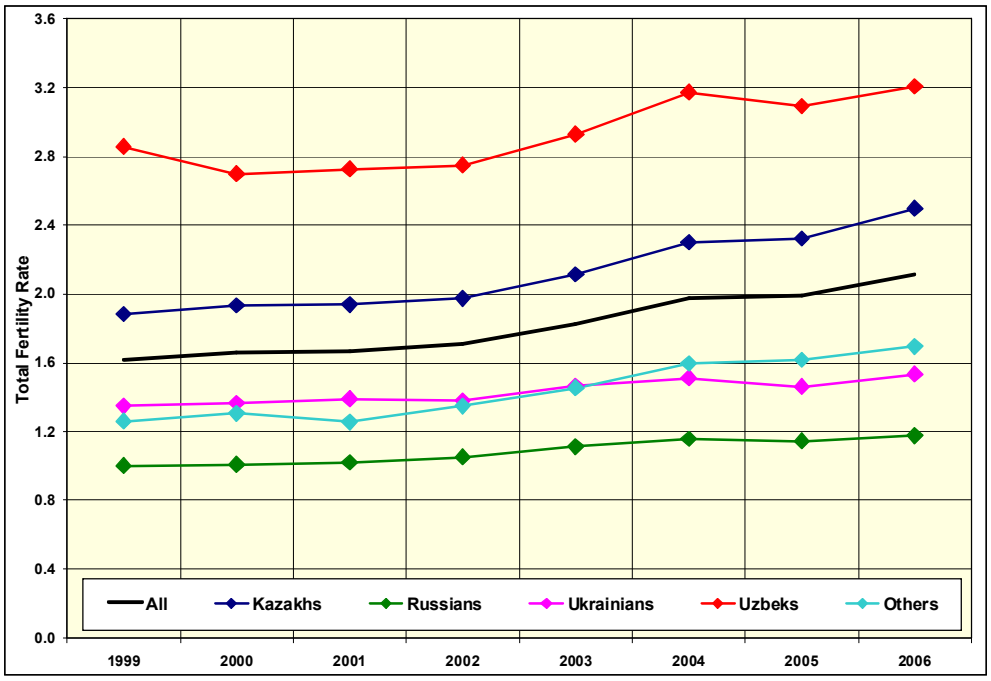
Figure 2 – Total Fertility Rate by types of settlement in Kazakhstan. 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

The trend in total fertility rates for each ethnicity between 1999 and 2006 is shown in Figure 3. The highest total fertility rate was found among Uzbeks (between 2.5 and 3.5), and the lowest among Russians (between 1.0 and 1.25). On the other hand, regarding the speed of increase of TFR in this period the fastest were Kazakhs (up to 1.33) and others (up to 1.34), the slowest were Uzbeks (up to 1.12), Ukrainians (up to 1.13) and Russians (up to 1.17). However, on average, each selected ethnicity showed increasing trends.

Figure 3 - Total Fertility Rate for selected ethnicity in Kazakhstan, 1999-2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

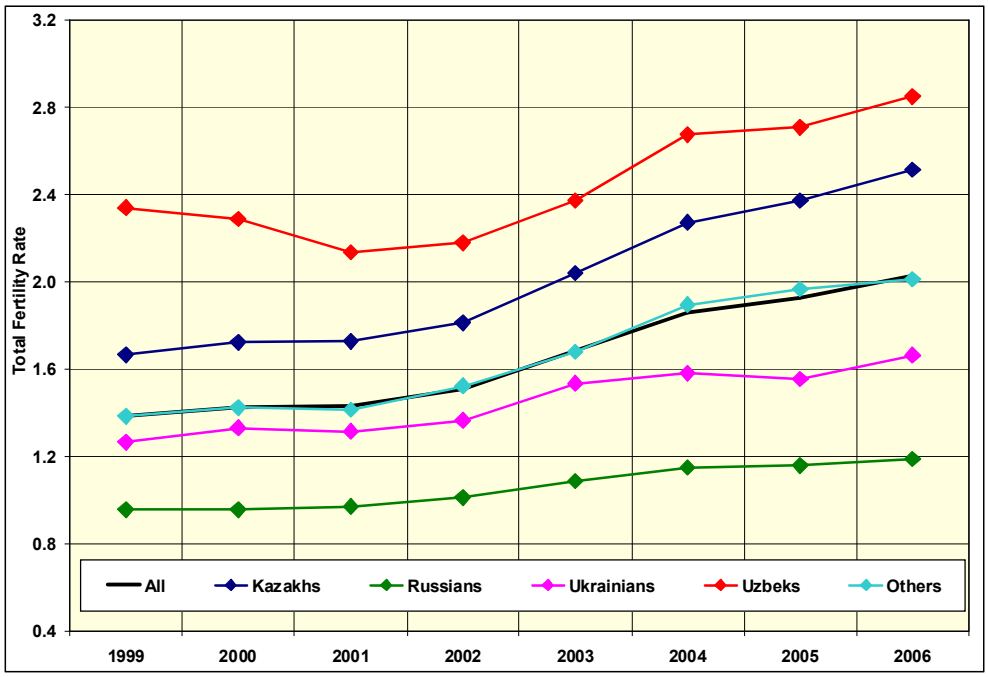
Note: The minimum age of TFR starts from 16 years old.

The trend in total fertility rate according to ethnicity in urban area in Kazakhstan showed the same hierarchy of levels as the whole country trend. However, among the Uzbek ethnic group fluctuations were observed between 2000 and 2004, and the reason of this decrease can be explained by a lot of people moving from rural to urban areas, especially those who came from Uzbekistani rural areas to Kazakhstani urban areas. This temporary change reduced their fertility behavior. Kazakh ethnicity presented a rapid increase in TFR from 1.62 in 1999 to 2.5 in 2006, which was the fastest speed among selected ethnic groups.

What concerns other ethnicities, during 1999-2006 Russian ethnic group showed the lowest position among all of them, their TFR of 0.96 in 1999 and 2000 changed their trend at the end of this period into an increasing tendency. Finally, in 2006 TFR reached 1.19.

In comparison with Russians, Ukrainian ethnic group is in better situation: their TFR was 1.27 in 1999 and increased up to 1.66 in 2006 (see the Figure 4).

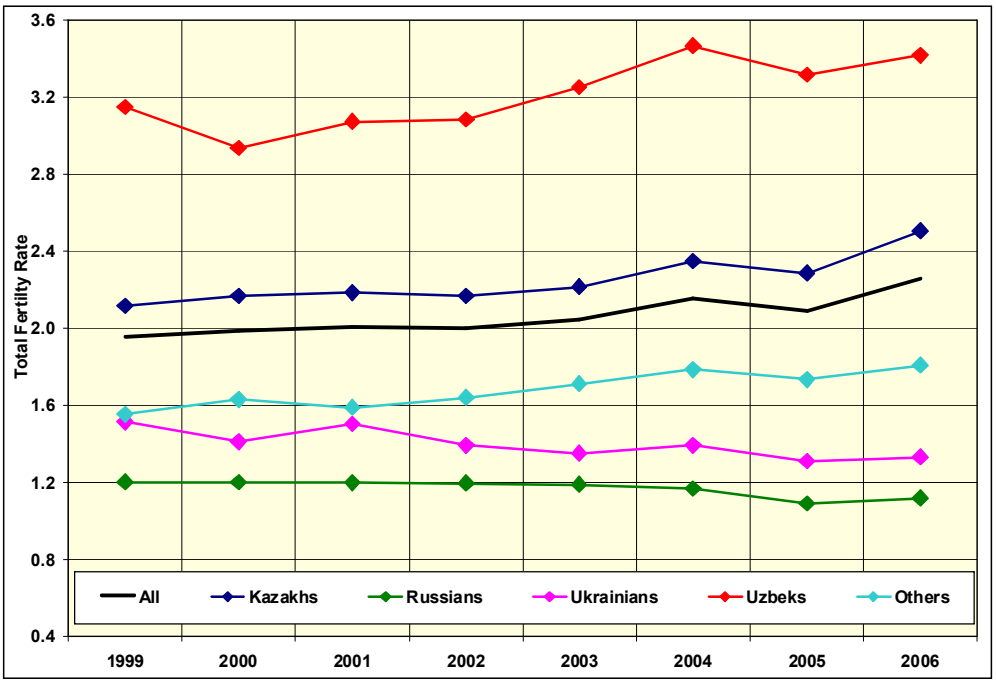
Figure 4 - Total Fertility Rate in urban area in Kazakhstan according to ethnicity, 1999-2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

Meanwhile the number of children per woman in rural area in each ethnic group between 1999 and 2006 was relatively higher in comparison with rural area which is shown in Figure 5. During the 1999 and 2003 Russian, Ukrainian, Kazakhs, and others ethnic groups held steady, whereas Uzbek ethnicity presented the highest and more fluctuated trend. Ukrainian and Russian ethnicities' TFR slightly declined: Ukrainian TFR of 1.51 in 1999 and in 2006 of 1.33, whereas Russian TFR of 1.20 in 1999 and in 2006 of 1.12.

Figure 5 – Total Fertility Rate in rural area in Kazakhstan according to ethnicity, 1999-2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

Having analyzed the trends of total fertility rates according to ethnicities and their native countries, as long as the types of settlements, the position of each ethnicity can be distinguished. The traditional Uzbek society has the highest TRF, the lowest was observed among non-traditional Russians and Ukrainians. What concerns mixed traditional Kazakhs, this ethnic group presented intermediate position among them.

6.2 Age-specific profiles

Having provided a general view of total fertility rate, we will try to examine the age-specific fertility rate (ASFR), which will provide the intensity of fertility by age structure during the 1999-2008.

The indicator "age-specific fertility rate" can be computed for a hypothetical cohort to provide period measurements and in a real cohort to provide generation measurements. However, only the period measurements are considered in this research paper.

As noted previously, the minimum age of having a baby starts from 16 years old. The age structure is represented by the following age groups: 16-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45 and over.

In Kazakhstan the number of live births for 1000 women in the given period changed: at the age group of 20-24 it increased from 599 to 725 children; at the age group of 20-24 it increased from 454 to 740, at the age group of 30-34 the intensity became two and a half times higher: from 272 to 509; and almost three times higher for the age group of 40-44: from

25 to 69, at the age group 45 and over the number did not changed: about 3 children. (see Table 1).

Hypothetically, women at the age group 40-44 and 45+ usually deliver children for a reason of delivering children "for themselves", in other words, to not be alone when they get older in case they did not get married. However, this tendency also occurred among married couples, especially among Kazakhs. It can be explained by two reasons: firstly, if the family did not have a son, secondly, abortion was not supported by at that time other members of family, especially in rural areas.

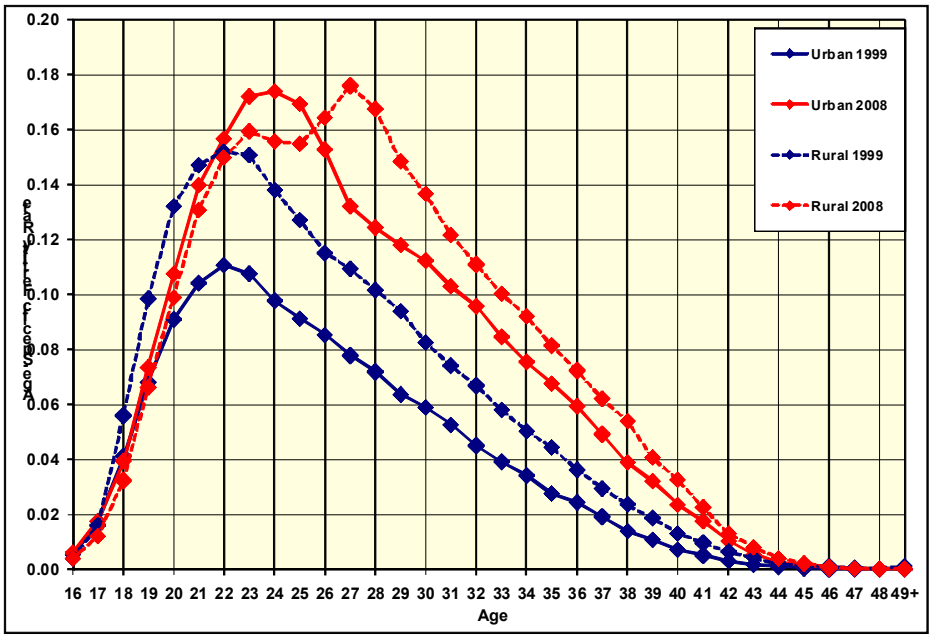
Table 1 - The number of live births per 1000 women by age for selected years

Age/year	1999	2003	2006	2008	Ratio 2008/1999
16-19	149	115	114	125	*0,84*
20-24	599	615	652	725	*1,21*
25-29	454	543	638	740	*1,63*
30-34	272	345	428	509	*1,87*
35-39	119	173	231	274	*2,30*
40-44	25	36	53	69	*2,76*
45+	3	2	3	3	*1,00*

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

The next figure 6 shows age-specific fertility rate by types of settlements. In order to see the difference between rural and urban areas during 1999-2008, the first and last year of this period will be considered. In comparison with rural, urban settlement showed that the highest point of ASFR increased only for the age group of 20-24 for both years, whereas in rural areas it shifted: the highest point of ASFR was in 1999 at 20-24 years old, in 2008 - at 25-29. In general, ASFR of these settlements obviously increased.

Figure 6 - Age-Specific Fertility Rate for urban and rural areas in Kazakhstan in 1999 and 2008



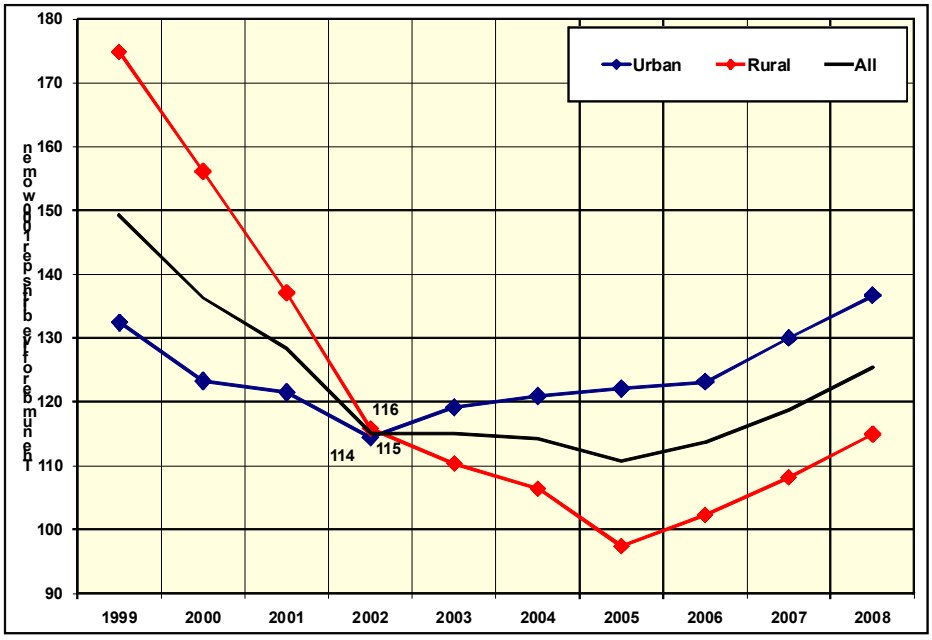
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

The changing trend of age-specific fertility rate by each age group and types of settlements gives more detailed information about them in the considered period.

The figure 7 shows the age group of 16-19 which presented absolutely different picture for older ages; it consists of four completed ages, while elder age groups consist of five completed ages. At the same time, this youngest age group shows so called "scissors" picture, crossing urban area with rural one in 2002. However, this crossing point is not exactly the same: urban percent of ASFR is 114 live births per 1000 women, while rural one is 116. From these crossing points of the trends of these areas are completely moderated: urban trend increased, whereas rural one completely declined till 2005 and then obviously raised.

Since 2000 Kazakhstan's economic situation has become stable, it positively influenced intensity of births in general. Despite the fact that it was the reason for increasing births among older ages (having second or third child), this youngest age group showed an upward trend. Unfortunately, we do not consider birth by parity because of the unavailability of data. However, the reasons that the picture shows "scissors" could be because of: 1) the data quality; 2) the number of women at the age of 19 is also low as live births at the same age.

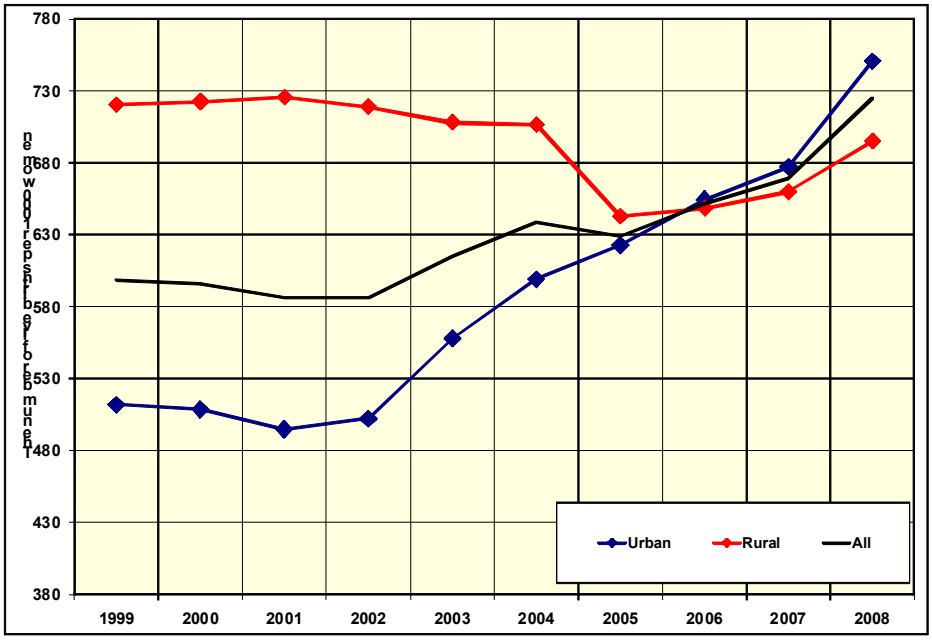
Figure 7 – The Number of live births per 1000 women at the age group of 16-19 according to types of settlements in Kazakhstan from 1999 to 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

The situation of intensity for the age group 20-24 is different from previously examined because the general trend did not fluctuate as the first one. The trend of the age group of 20-24 presented a big gap between urban and rural areas till 2005. The intensity of childbirth per 1000 women obviously increased in urban area, whereas rural area has shown an upward trend since 2002. There are several reasons to explain why women in urban areas give birth less often than women who live in rural areas at that age group. First, people in rural areas are usually more traditional and tend to have more children. Second, the way of life in urban areas is influenced by modern tends from all over the world: at the age of 20-24 women usually study at the university or start making carrier after graduating from the university. This is the biggest social change of contemporary times when women at those ages pay more attention to their education and professional career. That is why, more and more women at the age group of 20-24 prefer having a good career to motherhood in the first place. Third, the generation of 1975-1984 (with TFR around of 3.0) grew up and influenced the intensity of fertility in urban areas (see Annex 3). Moreover, the generation of 1975-1984 (TFR was around of 3.0) grew up and influenced the intensity of fertility. (see Figure 8).

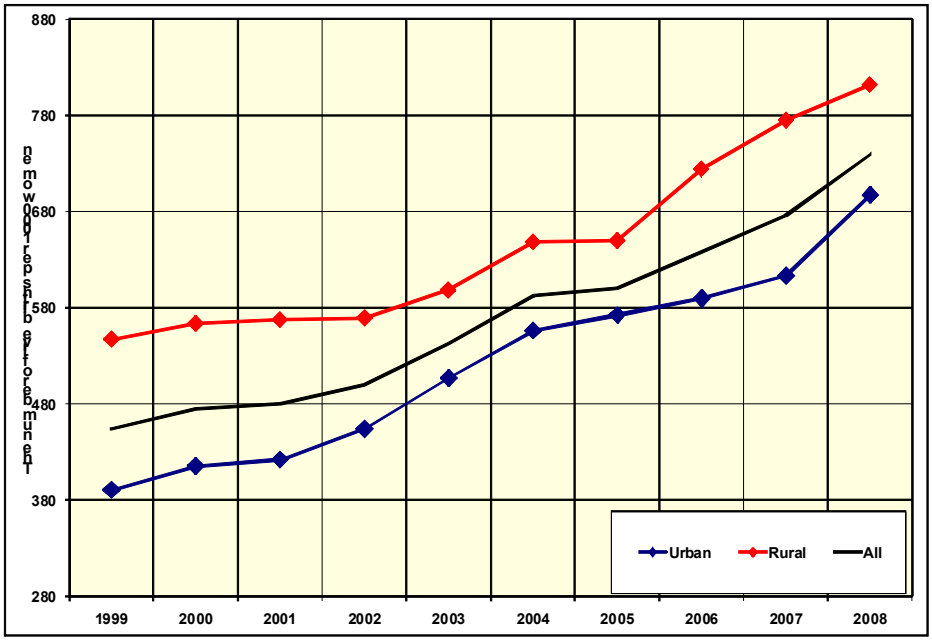
Figure 8 - The number of live births per 1000 women at the age group of 20-24 according to types of settlements in Kazakhstan from 1999 to 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

If in the last two age groups fluctuations were observed, the next age group of 25-29 presents the increasing tendency. As it was noticed before, urban area experienced lower number of births per 1000 women than rural. From year to year the intensity of fertility of age group of 25-29 increased from 391 up to 697 in urban and from 548 up to 812 births per 1000 women. (see Figure 9). However, the scale for age group 20-24 in the figure 5 is relatively higher than for the age group of 25-29. It means more births were given in the group 20-24 for women.

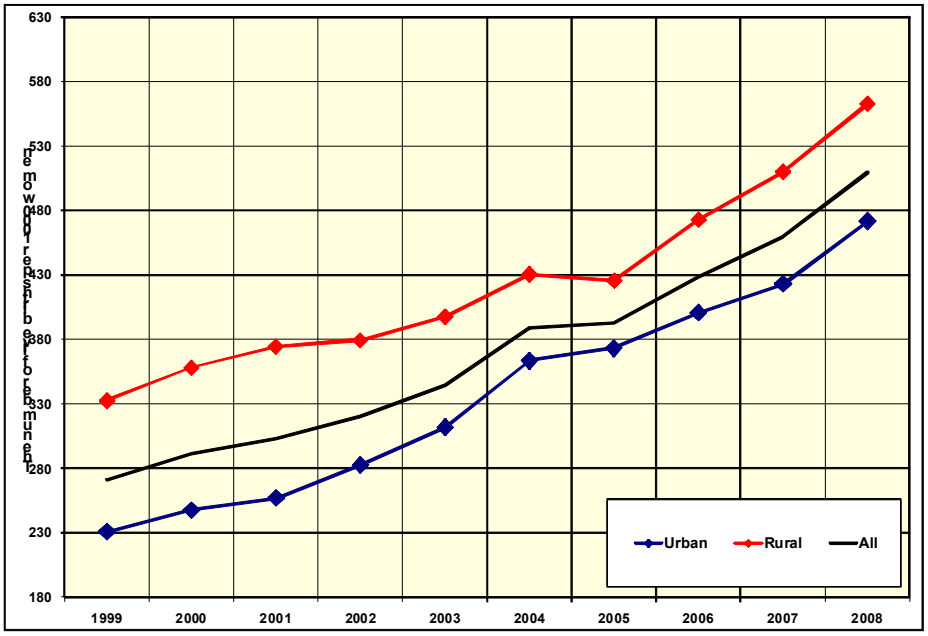
Figure 9 – The number of live births born per 1000 women at the age group of 25-29 according to types of settlements in Kazakhstan from 1999 to 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

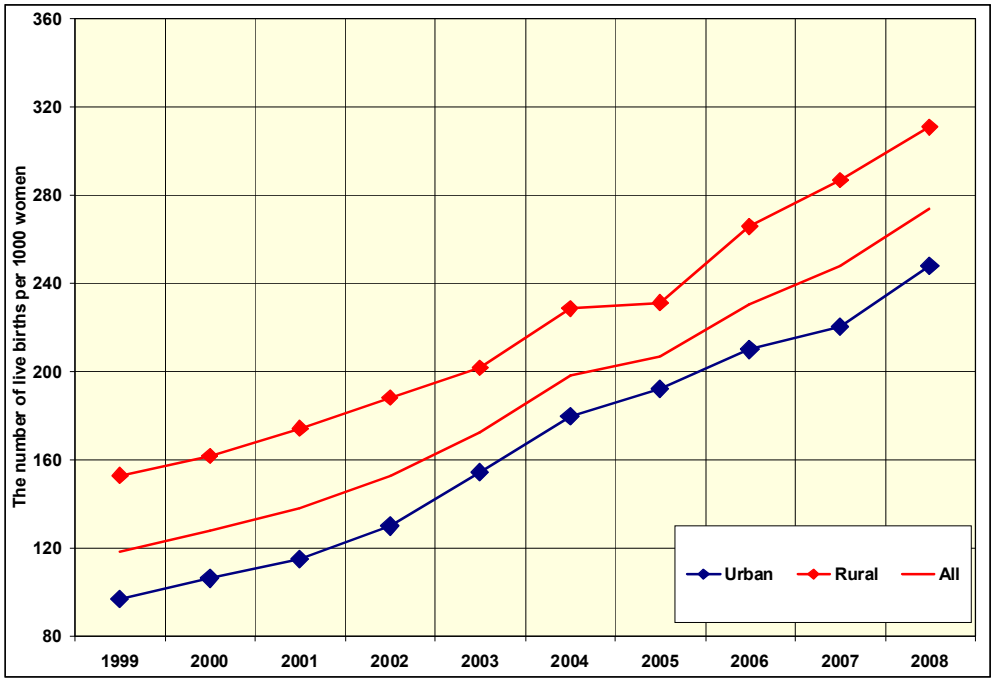
Starting from the age group of 30-34 till the end of the reproduction period the number of children per 1000 women declined in Kazakhstan from 1999 to 2008. However, in both cases of settlements the trend was going upward, but the age group of 45+ shows a fluctuation due to small numbers. (see Figures 10-13).

Figure 10 – The number of live births born per 1000 women at the age group of 30-34 according to types of settlements in Kazakhstan from 1999 to 2008



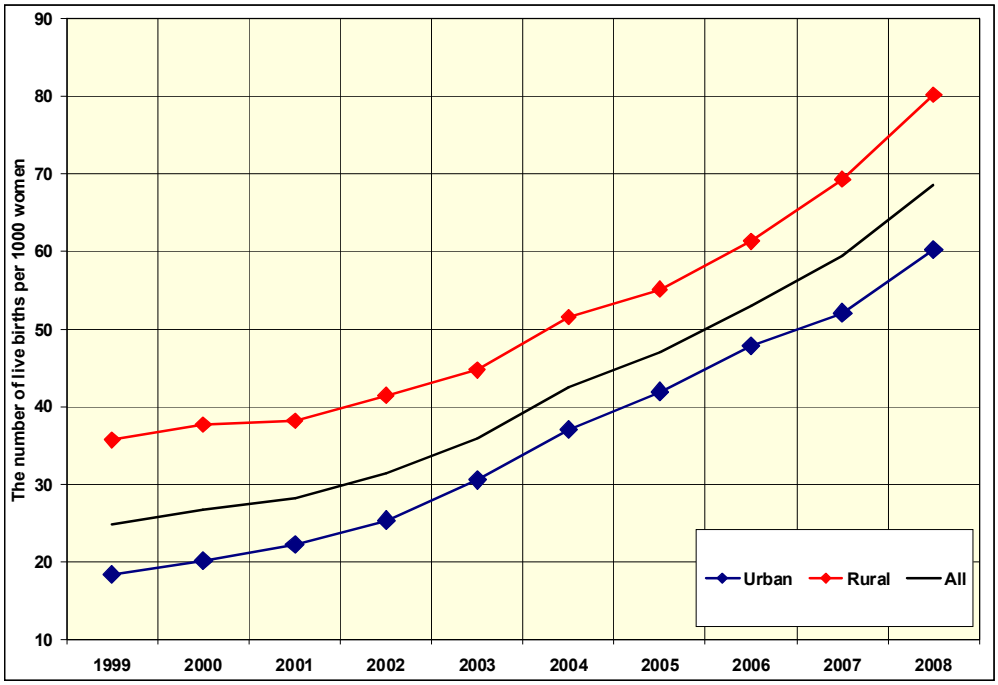
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

Figure 11 – The number of live births born per 1000 women at the age group of 35-39 according to types of settlements in Kazakhstan from 1999 to 2008 **1**



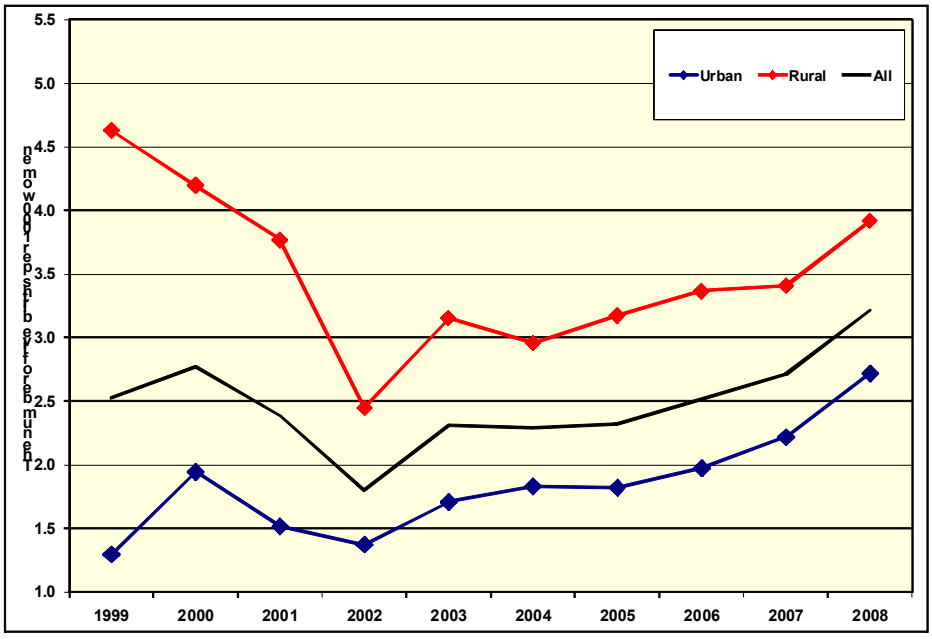
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of TFR starts from 16 years old.

Figure 12 – The number of live births born per 1000 women at the age group of 40-44 according to types of settlements in Kazakhstan from 1999 to 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

Figure 13 – The number of live births born per 1000 women at the age group of 45 and over according to types of settlements in Kazakhstan from 1999 to 2008



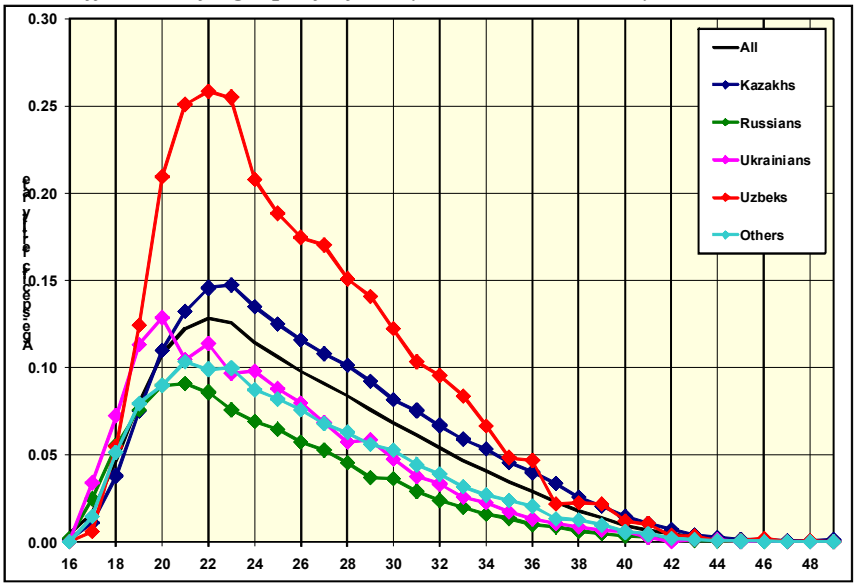
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

In short, the highest number of births among all age groups was at the age group of 20-24 years, and the lowest at 45+. Considering other figures, the intensity of the number of live births according to ethnicity will be examined, which will provide more detailed information.

According to the data from Kazakhstan Statistical Office, age-specific fertility rate by ethnicity was calculated only for the period 1999-2006.

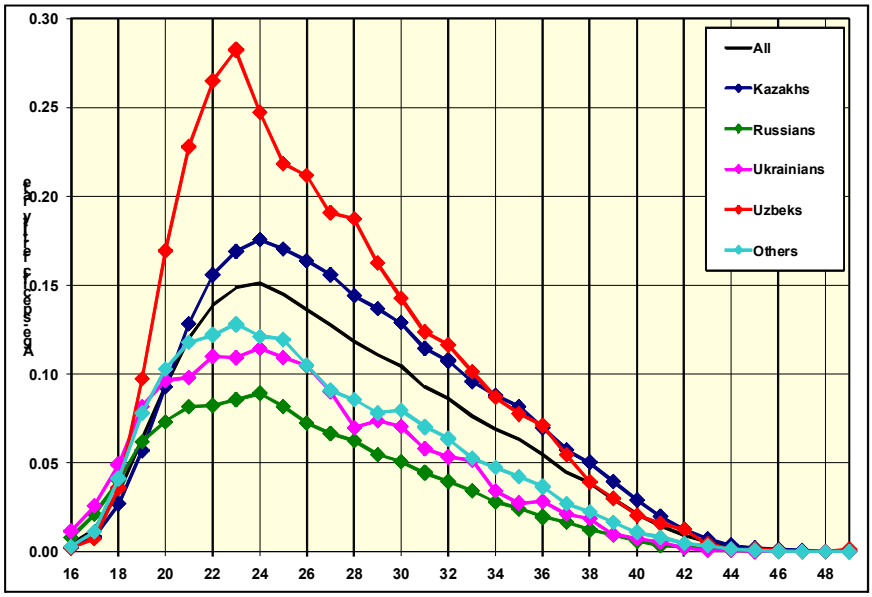
The figures 14 and 15 present the age-specific fertility rate according to ethnicity by units of age. Comparing two years 1999 and 2006 it can be noted that the highest intensity was shown by Uzbek ethnicity, whereas the lowest by Russian ethnic group. ASFR in all ethnic groups compared with 1999 increased in 2006.

Figure 14 – Differences of Age-specific fertility rate between ethnicity in 1999



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR is started from 16 years old.

Figure 15 – Difference of Age-specific fertility rate between ethnicity in 2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR is started from 16 years old.

The figures 16-21 illustrate each of the selected ethnic groups including others and all ethnic groups in 1999 and 2006. Kazakh ethnicity showed the highest point of age-specific rate in 1999 at the exact age of 23 and in 2006 it shifted to 24; Russian at 21 in 1999 and to 24 years old in 2006; Ukrainian at the age 20 in 1999 and it shifted to 24 in 2006; Uzbek at the age 22 in 1999 and in 2006 it shifted to 23; others ethnic groups at 21 in 1999 and in 2006 to 23 years old. Eventually, each of them presented the increasing trend in age-specific fertility rate.

Figures 16-21 – Differences of Age-specific fertility rate between 1999 and 2006 for each selected ethnicity

Figure 16

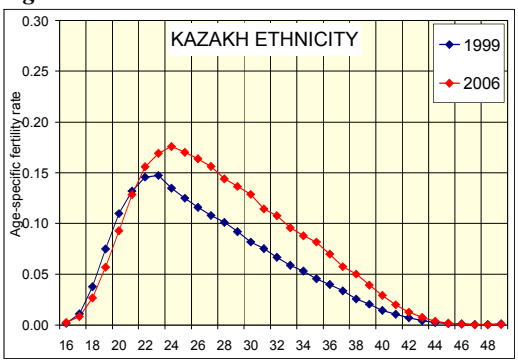


Figure 17

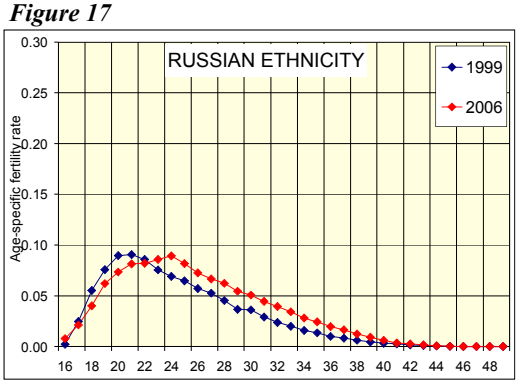


Figure 18

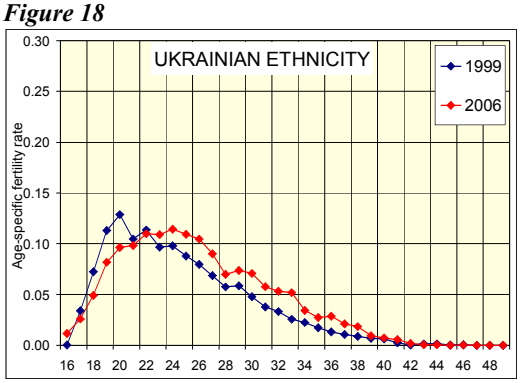


Figure 19

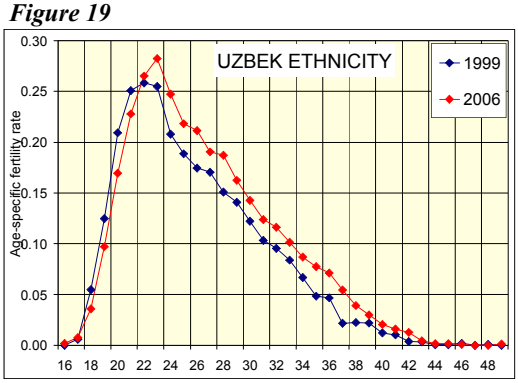


Figure 20

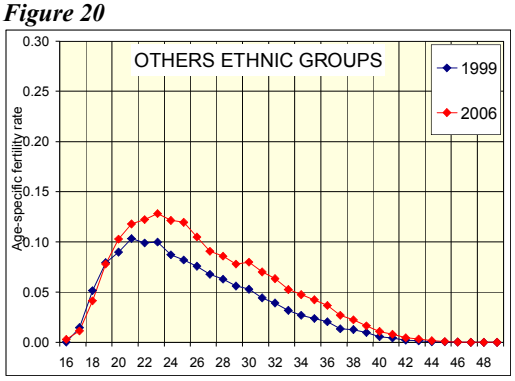
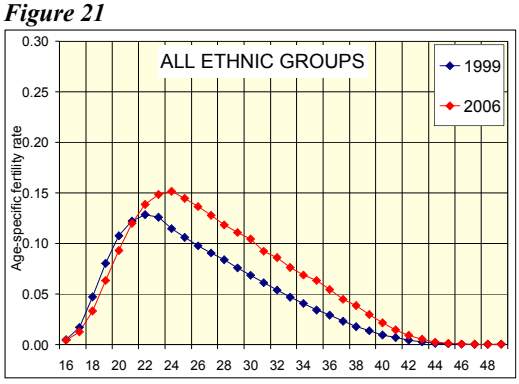


Figure 21



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Note: The minimum age of ASFR starts from 16 years old.

6.3 Mean age at childbirth

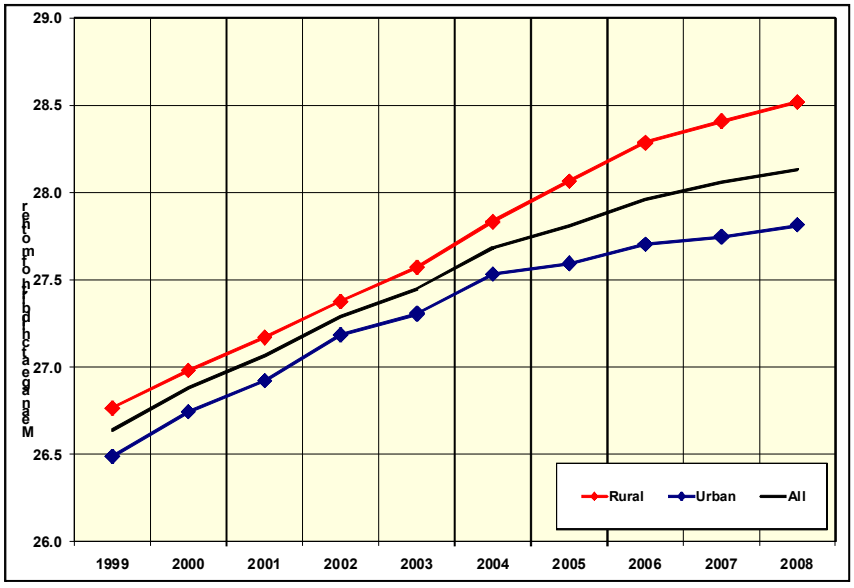
The age of mothers at childbearing can be estimated with the help of period data, which is used in this research paper. The period mean age at childbearing of a group of women at the age 16-49 for a given year summarizes the age pattern of a hypothetical cohort of women who have during their reproductive life births during 1999-2008.

Thus, the mean age at childbearing is a general indicator of the average age for having a baby. This indicator is average for every woman for the age group of 16-49 from 1999 to 2008.

Kazakhstan has a potentially increasing trend of the mean age of childbirth in general. It can be characterized in many different ways, but nowadays the most influential thing on fertility, as it was mentioned before, is building a career for women. After graduating from high school women do not hurry to get married and have children as many years ago. This trend is more typical for urban areas, however, women in rural settlements also have an increasing trend in the mean age at childbirth.

The figure 22 illustrates urban, rural and average trends of mean ages for each selected year. Urban area shows the lowest position, whereas rural the highest one. This difference has extended during last years. In 1999 women in average gave birth at the exact age of 26.49 in urban settlements and at the age 26.77 in rural areas. In comparison with the end of the selected period, mean age at childbirth increased up to 1.05 in urban area, up to 1.07 in rural and in general for whole Kazakhstan up to 1.05. In spite of the fact that there were small disparities, it can be highlighted that this tendency increased significantly for only one decade.

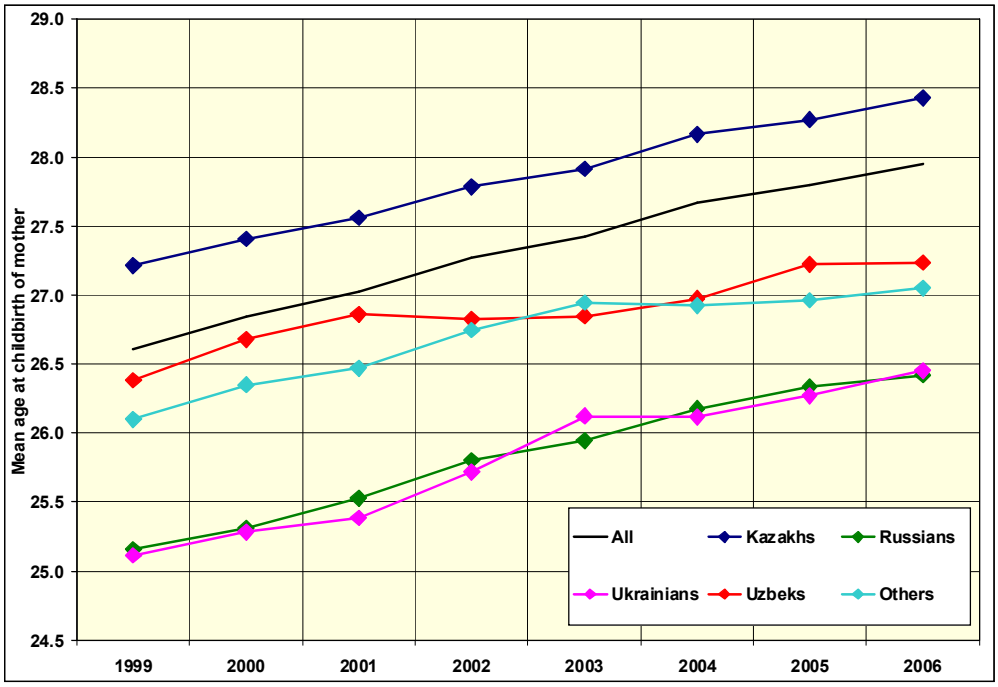
Figure 22 – Mean age at childbirth of mother for urban and rural settlements in Kazakhstan, 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

Now the situation will be considered in terms of ethnicities. Similarity between ethnicity exists among non-traditional ethnicities like Russians and Ukrainians. However, traditional and mixed ethnic groups showed absolutely distinctive positions among all of them: Uzbeks present slightly fluctuating trend, whereas Kazakhs shows a gradually increasing one and showed the highest position in mean age at childbearing among other ethnic groups during the 1999-2006. (see Figure 23).

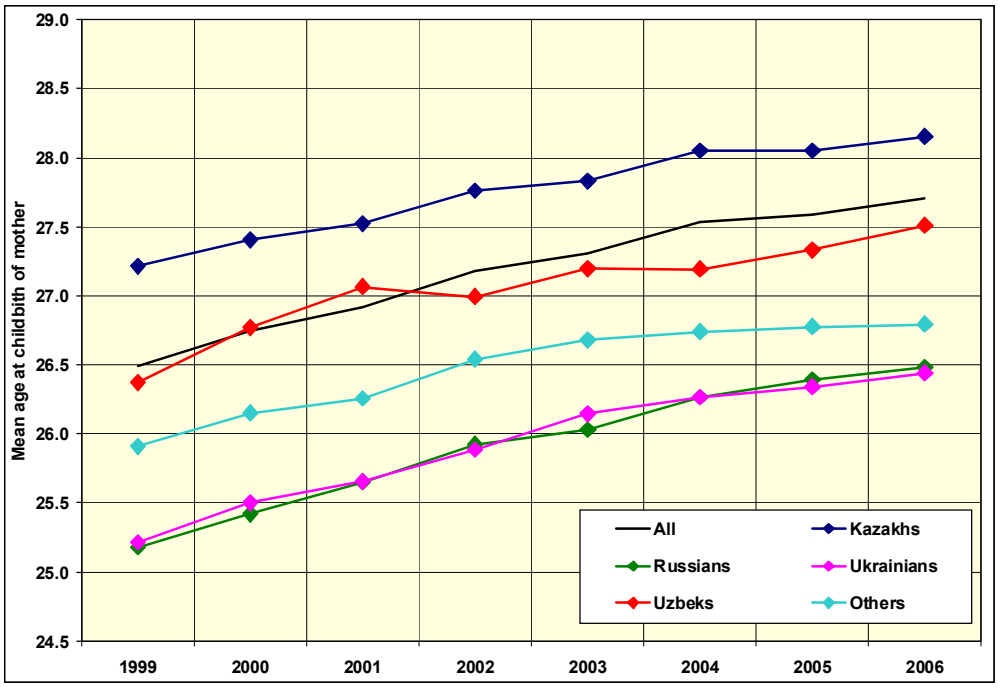
Figure 23 – Mean age at childbirth of mother according to ethnicity in Kazakhstan, 1999-2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

The trends of mean age at childbirth by each ethnicity for urban and rural areas illustrated almost similar tendency: in both areas the increasing trend and position of each ethnicity did not changed. (see the Figure 24). However, the most important thing was that in rural area this trend was faster than in urban area, e.g. in urban settlement in 1999 mean age at childbirth was 26.49. In 2006 it reached 27.70 while in rural area it was 26.76 in 1999 and it reached 28.29 years old in 2006. Figure 25 illustrates an upward trend in each settlement for Kazakh, Russian, Ukrainian, Uzbek and other ethnic groups.

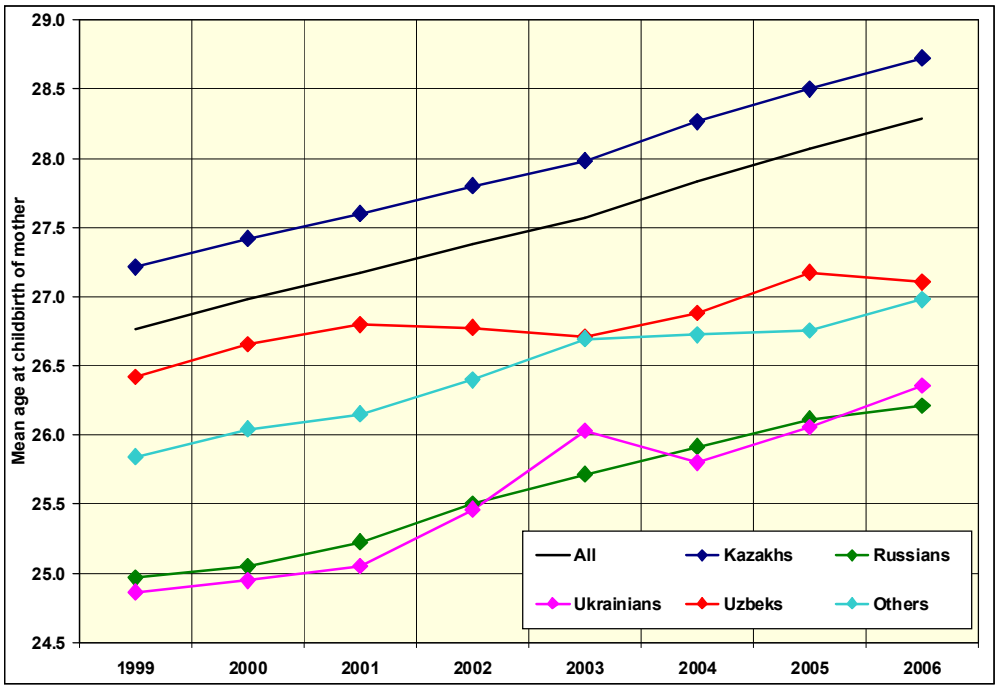
Figure 24 – Mean age at childbirth of mother according to ethnicity for urban area in Kazakhstan, 1999-2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Note: The minimum age of ASFR starts from 16 years old.

Figure 25 – Mean age at childbirth of mother according to ethnicity for rural area in Kazakhstan, 1999-2006

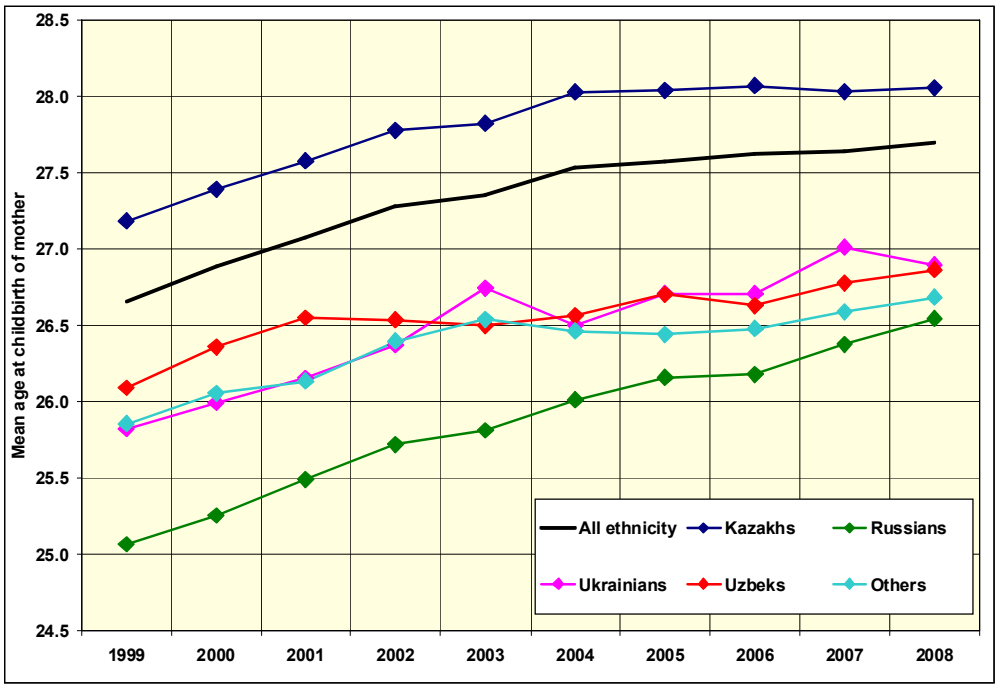


Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Note: The minimum age of ASFR starts from 16 years old.

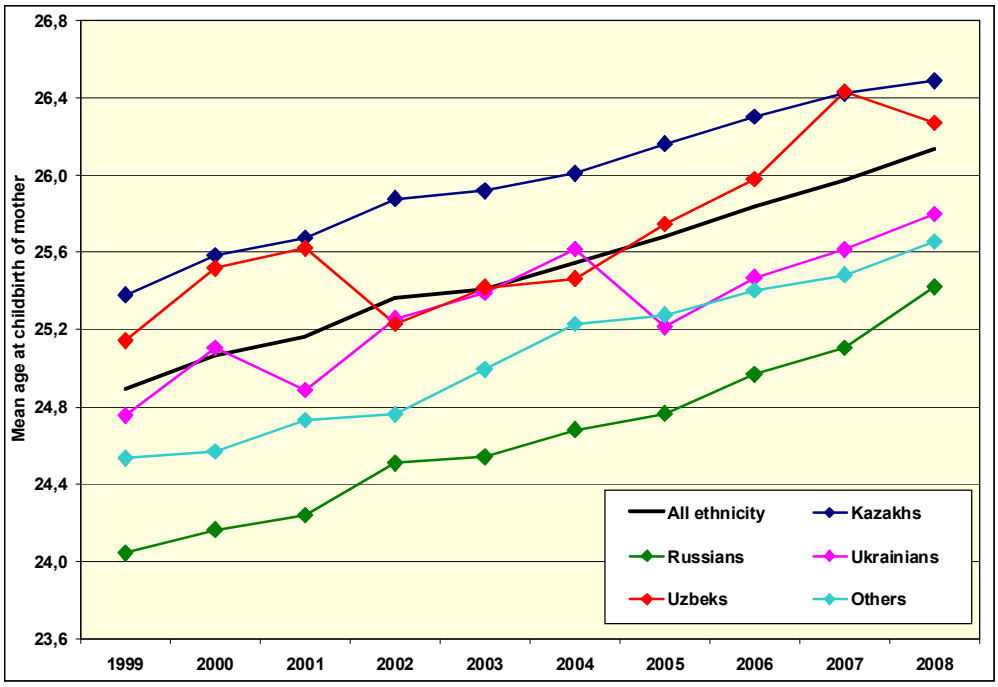
Mean age at childbirth according to marital status of each ethnic group illustrated the following: in both cases women of Kazakh ethnic group was the oldest, the youngest was Russian ethnicity from 1999 to 2008. Separately, the trend in marital case was slightly higher than in unmarried one. (see Figures 26 and 27). Mean age at childbirth among unmarried women younger due to intensity of extramarital births was higher in those ages, which will be explained in the next paragraph.

Figure 26 – Mean age at childbirth of mother according to ethnicity for married women in Kazakhstan, 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

Figure 27 – Mean age at childbirth of mother according to ethnicity for unmarried women in Kazakhstan, 1999-2008

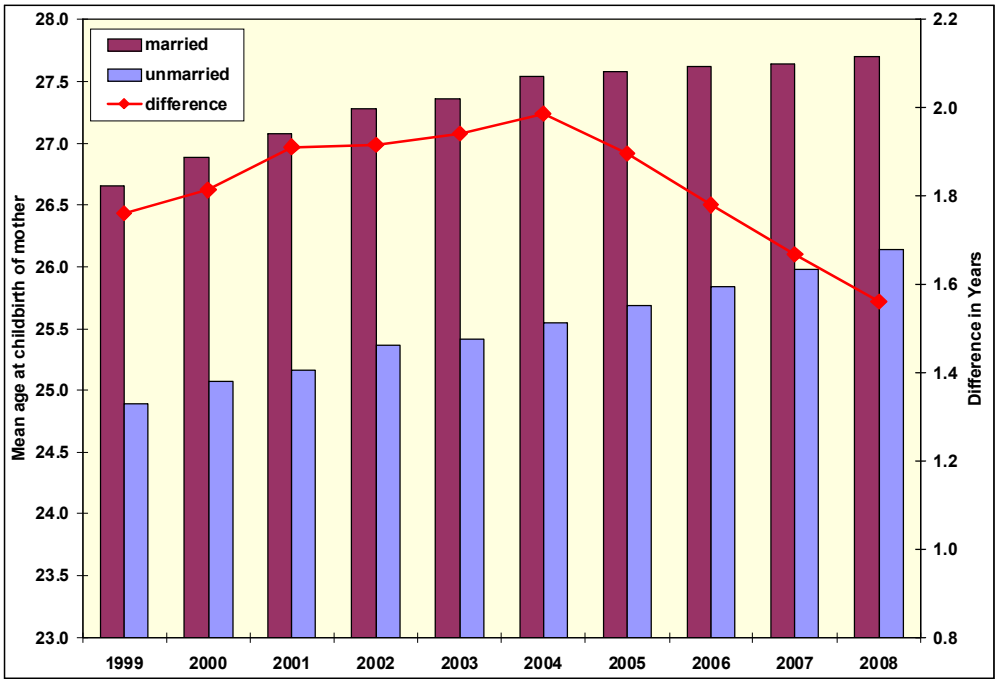


Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of ASFR starts from 16 years old.

The figure 28 illustrates the mean ages at childbirths for married and non-married fertility from 1999 to 2008. The mean ages for married fertility are older than for non-married, also both of marital status had an increasing trend. In the beginning of the considered period the mean age for married women was 26.65, for non-married it was 24.89, whereas in the end of period that age was older. For marital it was 27.70 years old, for non-marital - 26.14. However, the difference between them reduced obviously - in 1999 it reduced to 1.76 and in 2008 it decreased to 1.56 years old.

The reason for the mean age at childbirth of non-marital births to become older can be explained by the types of extramarital births as well as "divorced", "widowed' and "never married", which were not considered in this research paper (see Chapter 5).

Figure 28 – The difference between mean ages at childbirths of mothers by marital status in Kazakhstan from 1999 to 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

In short, the indicator of the mean age obviously changed in Kazakhstan during the last decade; Kazakh and Uzbek ethnic groups are older among selected ethnicities, and regarding the marital status, mean age of women in marriage became older than in non-marriage.

6.4 Patterns of extramarital fertility

Each ethnicity is distinctive in culture, traditions, life values, demographic and social attitudes which effect fertility. For example, in Kazakhstan, those ethnic groups, that are more traditional, have more children and most of births are given in marriage, but those ethnic groups that are more modern, have less children and more frequently births – outside marriage.

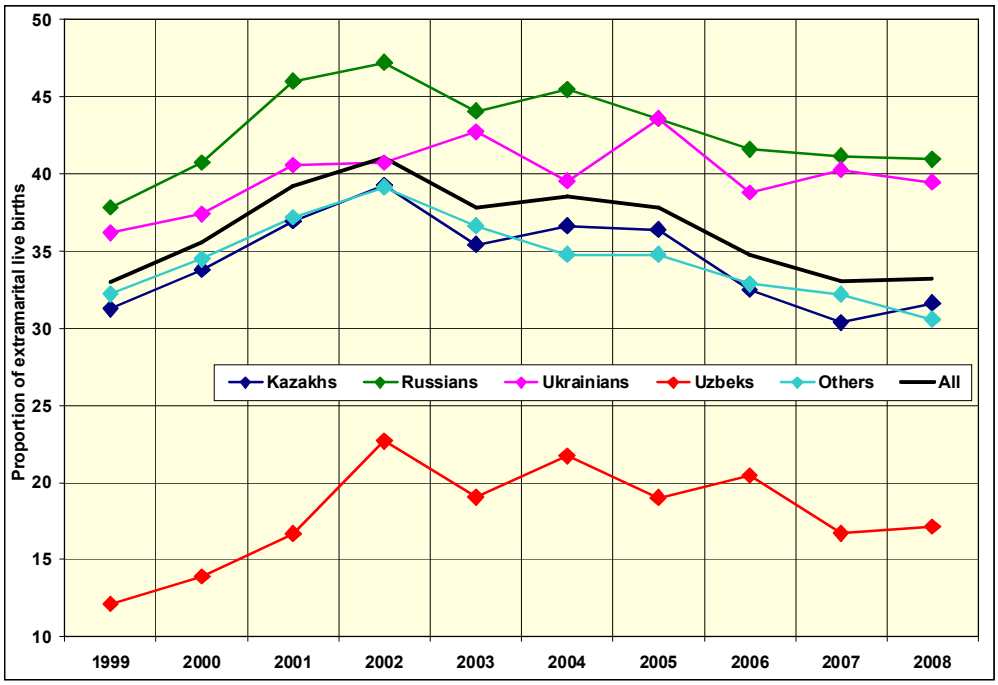
However, in general, despite the fact that in many countries cohabitation partnership becomes more and more popular nowadays, this indicator decreased in Kazakhstan. According to ethnic differences, however, an upward trend was observed among some traditional society (like Uzbek), which will be explained in the next paragraphs.

Having analyzed extramarital births by mother's age groups (16-19, 20-24, 25-29, 30-34, 35 and over), we have found out that the highest proportion of extramarital births were among the youngest age group and the lowest - among the oldest age group. Russian ethnicity displayed the highest percentage of extramarital births, whereas Uzbek ethnicity showed the lowest percentage in each age group during the 1999-2008. Moreover, each older age group displays lower percentage in the consecutive order.

The figures 29-34 show the proportions of extramarital births for each age group by ethnicity. In addition, the table 3 shows the number of out-of-wedlock birth between 1999 and 2008.

The figure 29 presents the trend of extramarital births according to ethnicity at the age group 16-19. As it was mentioned above, the lowest percentage of extramarital births is typical among Uzbek ethnic group, the highest - among Russians. However, the most important point is that the Uzbek ethnic group shows the highest upward tendency from 12.1 % in 1999 to 17.1 % in 2008, which means 1.41 times higher from the beginning of that period (see Table 3). Between 1999 and 2008 the highest of percentage of extramarital births was in 2002 among almost all ethnic groups, excluding Ukrainian, and after 2002 the tendency was slowly going down (Dyussupova 2010).

Figure 29 – The proportion of extramarital live births according to ethnicity at the age group 19-19 in Kazakhstan, 1999-2008

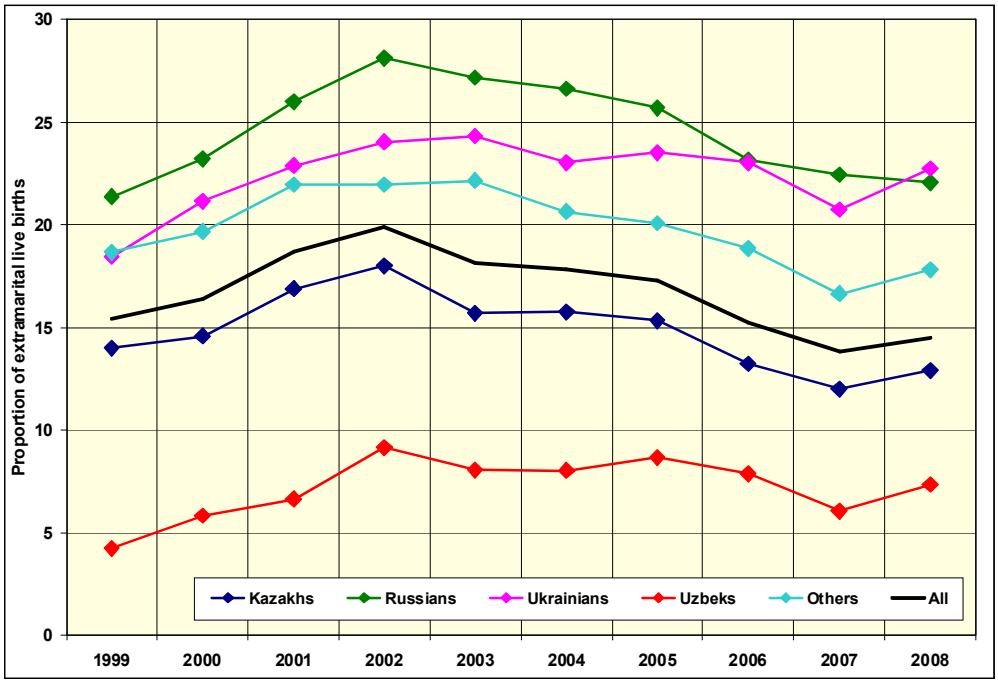


Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of the proportion starts from 16 years old.

The percentage of extramarital births of the next age groups 20-24, 25-29, 30-34 is relatively lower than in previous age group, despite the fact that the graphs look similar (but the scale is different): the lowest level is observed among Uzbeks and the highest among Russian ethnic groups. In 2002 almost every ethnicity experienced the "peak" of percentage of non-marital births, but among Uzbek ethnic group it was at the age group 25-29 in 2005 and at the age group 30-34 in 2006 (see Figure 30, 31, 32 and 33).

The oldest age group of 40 and over shows fluctuations due to the small numbers (see Figure 34).

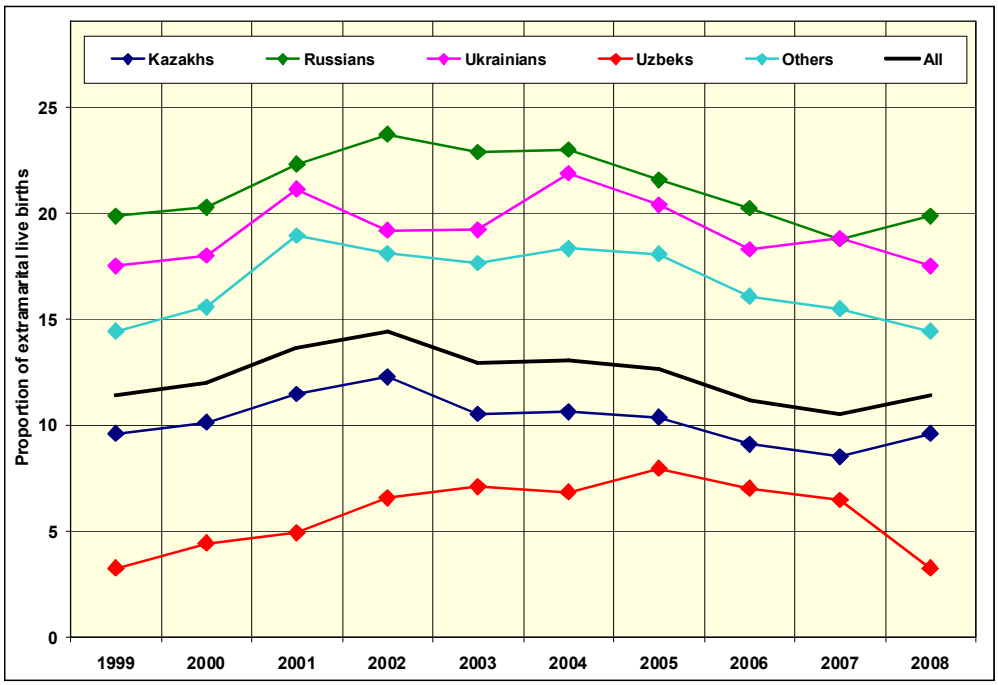
Figure 30 – The proportion of extramarital live births according to ethnicity at the age group 20-24 in Kazakhstan, 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Note: The minimum age of the proportion starts from 16 years old.

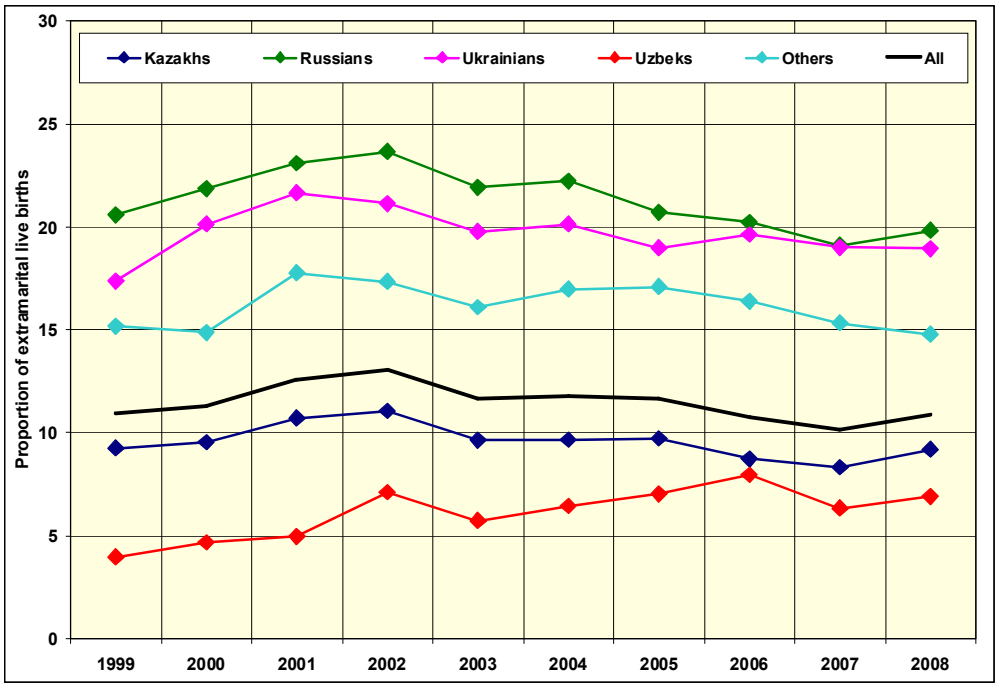
Figure 31 – The proportion of extramarital live births according to ethnicity at the age group 25-29 in Kazakhstan, 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

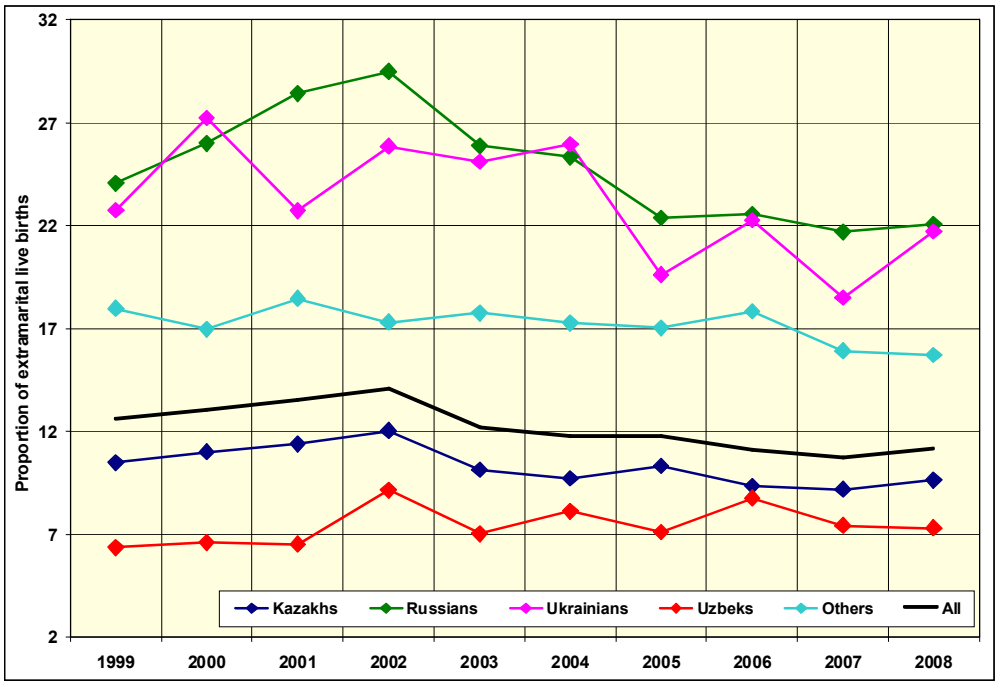
Note: The minimum age of the proportion starts from 16 years old.

Figure 32 – The proportion of extramarital live births according to ethnicity at the age group 30-34 in Kazakhstan, 1999-2008



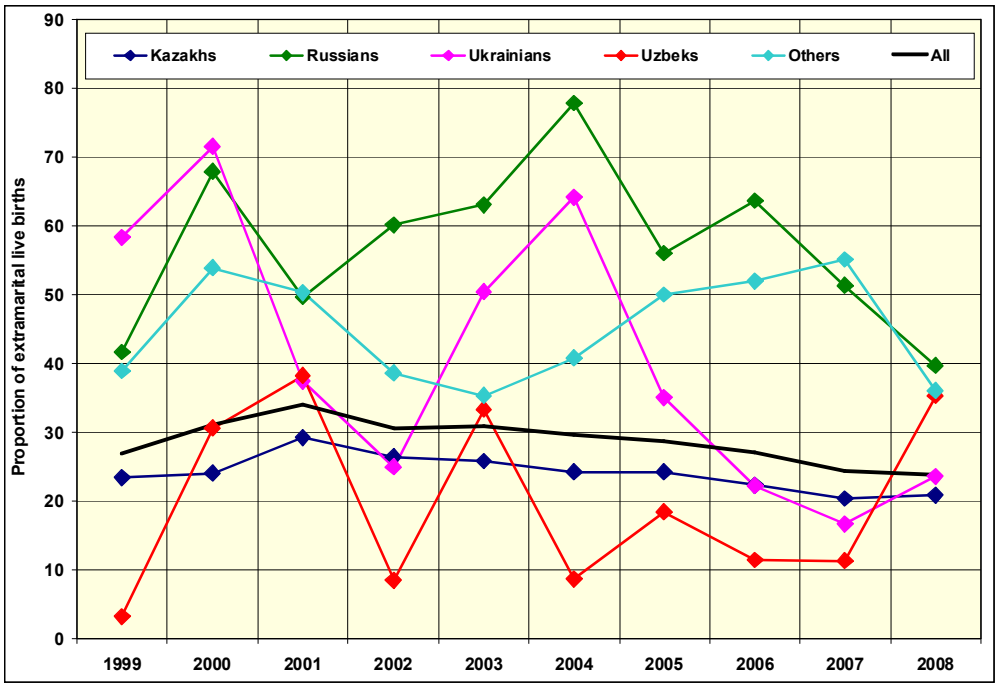
Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of the proportion starts from 16 years old.

Figure 33 – The proportion of extramarital live births according to ethnicity at the group of 35-39 in Kazakhstan, 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of the proportion starts from 16 years old.

Figure 34 – The proportion of extramarital live births according to ethnicity at the age group 40 and over in Kazakhstan, 1999-2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of the proportion starts from 16 years old.

The unexpected pattern has observed in traditional Uzbek society that has experienced the fastest increase in the proportion of extramarital births. (see Figure 35). The reasons behind can be the following. Firstly, the time pressure: transition from traditional to modern kind of family. Secondly, migration: the wave of illegal work immigrants of Uzbek ethnic group in Kazakhstan. Their number increased since 2000. "The problem of labor force migration from Central Asia is going to be more perceptible from year to year for Kazakhstan. Totally its character is illegal" reported Kazakhstan's newspapers (Newspapers), and it must be highlighted that every pregnant woman in Kazakhstan can deliver her child in state-owned hospital without showing her passport, just providing her address, which is nowadays available for everyone in Kazakhstan. Moreover, illegal migrants cannot officially register their marriage in Kazakhstan, only traditional wedding, that is why child born in that kind of family is registered as an extra-marital (Dyussupova 2010).

In addition, the proportion of extramarital births showed that the increasing of the number of extramarital births can also be explained by more extended non-registered marriage, so-called "co-habitation", that is why unfortunately this kind of marriage we can not observe.

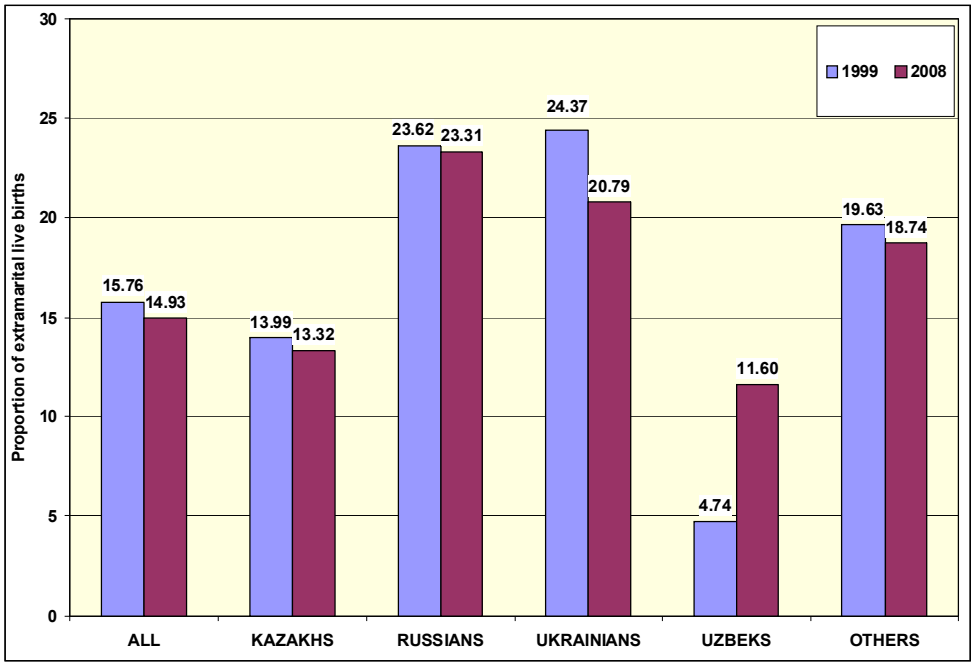
The difference of changing trend of extramarital fertility between 1999 and 2008 among Kazakhs was -0.83, Russians was -0.03, Ukrainians was -0.67, Uzbeks was 6.83, others was -0.59 and for all ethnic groups was -0.90. (see Figure 35).

Table 3 – The change of the percentage of extramarital live births between 1999 and 2008 by age groups and ethnicity

		Kazakhs	Russians	Ukrainians	Uzbeks	Others	All
16-19	1999	31.24	37.82	36.19	12.14	32.20	32.94
	2008	31.63	40.93	39.47	17.11	30.57	33.20
	increased	*1.01*	*1.08*	*1.09*	*1.41*	*0.95*	*1.01*
20-24	1999	13.99	21.34	18.45	4.23	18.65	15.43
	2008	12.90	22.05	22.74	7.33	17.81	14.51
	increased	*0.92*	*1.03*	*1.23*	*1.73*	*0.96*	*0.94*
25-29	1999	9.60	19.85	17.47	3.25	14.41	11.41
	2008	9.60	19.85	17.47	3.25	14.41	11.41
	increased	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
30-34	1999	9.27	20.59	17.38	3.99	15.18	10.94
	2008	9.22	19.84	18.94	6.92	14.78	10.88
	increased	*0.99*	*0.96*	*1.09*	*1.74*	*0.97*	*0.99*
35-39	1999	10.47	24.04	22.73	6.36	17.97	12.59
	2008	9.61	22.05	21.70	7.31	15.71	11.13
	increased	*0.92*	*0.92*	*0.95*	*1.15*	*0.87*	*0.88*
40-44	1999	11.50	28.32	24.75	3.23	24.35	14.77
	2008	10.11	22.27	23.60	8.64	19.74	11.49
	increased	*0.88*	*0.79*	*0.95*	*2.68*	*0.81*	*0.78*
45+	1999	11.87	13.36	33.60	0.00	14.63	12.21
	2008	10.76	17.43	0.00	26.67	16.40	12.33
	increased	*0.91*	*1.30*	*0.00*	*0.00*	*1.12*	*1.01*

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Figure 35 – The proportion of extramarital live births of selected ethnicity in Kazakhstan between 1999 and 2008



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.
Note: The minimum age of the proportion starts from 16 years old.

6.5 Differences in marital and extramarital fertility

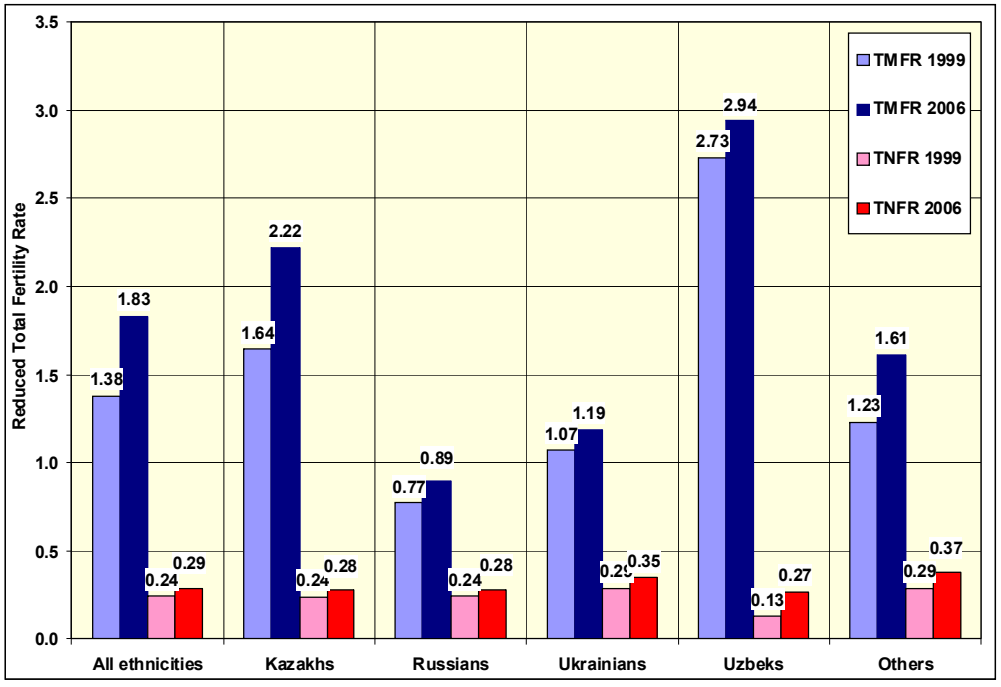
Having analyzed the general picture of fertility rates and proportion of extramarital fertility, it is necessary to look at the difference of reduced total fertility rates in 1999 and 2006 according to ethnicity and by marital status (Table 4 and Figure 36). The difference between 1999 and 2006 in total marital fertility rate among Kazakhs was the biggest at about 0.6, and the lowest among Ukrainians at about 0.12. At the same time, the difference of total extramarital fertility rate was the highest among Uzbeks at about 1.14, and the lowest among Kazakhs – 0.04. In addition to reduced fertility rate, the differences in total fertility rate were observed, where the highest difference was among Kazakhs (0.61) and the lowest was among Russians (0.17).

Table 4 – The difference in reduced total fertility rates between 1999 and 2006 by ethnicity in Kazakhstan

	Total Marital Fertility Rate			Total Extramarital Fertility Rate			Total Fertility Rate		
	1999	2006	Difference	1999	2006	Difference	1999	2006	Difference
All ethnicities	1,38	1,83	0,45	0,24	0,29	0,05	1,62	2,12	0,5
Kazakhs	1,64	2,22	0,58	0,24	0,28	0,04	1,88	2,5	0,61
Russians	0,77	0,89	0,12	0,24	0,28	0,04	1,01	1,18	0,17
Ukrainians	1,07	1,19	0,12	0,29	0,35	0,06	1,36	1,53	0,17
Uzbeks	2,73	2,94	0,21	0,13	0,27	0,14	2,86	3,21	0,35
Others	1,23	1,61	0,38	0,29	0,37	0,09	1,51	1,99	0,47

Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Figure 36 – Reduced Total Fertility Rate according to ethnicity in Kazakhstan in 1999 and 2006



Source: Author's calculations based on the data from the Agency of Statistics of the Republic of Kazakhstan.

Note: The minimum age of ASFR is started from 16 years old.

To summarize, the observation of the proportion of extramarital live births by ethnicity in Kazakhstan showed specific background according to their demographic and sociologic attitudes and values. Recent changes in economic systems impacted fertility in both cases: marital and extramarital. Stabilization of the economy can also be a reason of increasing of

number of extramarital births, because the births out-of-wedlock could occur more frequently in the oldest age groups of women, suggesting a strategy of having child not for family, but "for themselves", which was explained by the increasing of the mean age at childbirths for unmarried women.

7. Conclusion

The transition from the end of the XX century to the beginning of the XXI was a significant period for Kazakhstan. On the one hand, it is significant due to the independence, economic stabilization, and on the other hand, socio-cultural aspects as well as policy of multi ethnic and poly-confessional directions were well formatted. Due to such positive atmosphere in Kazakhstan, the number of live birth per woman in the country increased from 1.7 in 1999 to 2.4 in 2007. To compare the number of live birth per women among ethnicity of Kazakhstan in their titular ethnicity, increasing trend only in Russia from 1.2 to 1.4 was observed. However, in Ukraine it was unchanged in 1999 and 2007. It was 1.2, whereas in Uzbekistan it decreased from 2.7 down to 2.4 (www.worldbank.org). Such changes in total fertility rate could be explained by economical and political development of each country, it cannot be compared with developed countries, especially European patterns due to the mentality and regional differentiation.

Kazakhs, Russians, Ukrainians and Uzbeks are the major ethnicities in Kazakhstan, they showed different tendency in marital fertility in Kazakhstan. However, it is important to note that all ethnicities had marital form of partnership as a dominant one, moreover, almost all of them (excluding Uzbeks) showed downward trends in recent times, which can be explained by the fact that each ethnicity in Kazakhstan is still family oriented. Regarding the traditional Uzbek ethnicity, it happened because the number of illegal migrants increased in Kazakhstan from 2000 and because of the registration form in hospital in Kazakhstan. In other words, every pregnant woman providing her address without passport, which is not obligatory, can deliver her child for free and registered him/her as an extramarital birth. That is why the proportion of extramarital births of Uzbek society increased in Kazakhstan, which does not mean that a traditional family -oriented ethnicity rapidly changed their life style.

To conclude the research paper of Master thesis on the topic “Recent changes in marital and extramarital fertility in Kazakhstan”, the main focus will be the given research questions and hypothesizes.

1. *What changes were in trends of marital and extramarital fertility in Kazakhstan and its urban and rural areas during the considered period from 1999 to 2008?*

During the 1999-2008 the lowest level of total fertility rate was among the urban population. However, since 2005 the gap between urban and rural populations has been narrowed due to the rapid increase of TFR in the urban area.

2. *What were the shares in marital and extramarital fertility among ethnic groups in Kazakhstan during the 1999-2008?*

The highest share in marital fertility was among traditional Uzbek ethnicity, whereas the lowest was among non-traditional Russian ethnicity. The number of extramarital fertility increased only among Uzbek ethnic group, whereas non traditional and mixed traditional ethnicities showed the decreasing tendency in the proportion of extramarital fertility.

3. *In the given research what types of ethnicity changed more during the 1999-2008: traditional or non-traditional?*

According to all tendencies the significant changes were not among all ethnicities, each of them showed an upward trend in total fertility rate. For example, in 1999 and 2006 TFR among Kazakhs increased from 1.88 up to 2.50, among Russians from 1.00 up to 1.18, among Ukrainians from 1.35 up to 1.53, among Uzbeks from 2.86 up to 3.21, even among other ethnic groups from 1.26 up to 1.69. Thus, the hypothesis "traditional ethnic groups became more modern" is not relevant, and "non-traditional ethnicities showed stable trends in marital fertility" are confirmed the stability with a slight increasing trends.

4. *What were the intensities in marital fertility by age structure of each ethnicity?*

The intensity in marital fertility by age structure of the selected ethnicity showed shifting to older ages, for instance, Kazakh ethnicity showed the highest point of age-specific rate in 1999 at the exact age of 23 and in 2006 it shifted to 24; Russian at 21 in 1999 and to 24 years old in 2006; Ukrainian at the age 20 in 1999 and it shifted to 24 in 2006; Uzbek at the age 22 in 1999 and in 2006 it shifted to 23; others ethnic groups at 21 in 1999 and in 2006 to 23 years old. Eventually, each of them presented the increasing trend in age-specific fertility rate.

5. *What were the differences in marital and extramarital fertility between ethnicities?*

The difference between 1999 and 2006 in reduced total marital fertility rate among Kazakhs was the highest at about 0.6, and the lowest among Ukrainians at about 0.12. At the same time, the difference of total extramarital fertility rate was the highest among Uzbeks at about 1.14, and the lowest among Kazakhs – 0.04. In addition to reduced fertility rate, the differences in total fertility rate were observed, where the highest difference was among Kazakhs (0.61) and the lowest was among Russians (0.17).

Regarding the last research question about the reasons of changing trends of marital and extramarital fertility according to ethnicity in Kazakhstan during the considered period, it can be noted that the changes did not depend only on economic and political adjustments in Kazakhstan during the 1999-2008. Modernization, urbanization and education played their roles in marital and extramarital fertility in Kazakhstan as well.

Year on year a wedding ceremony takes places more and more. For example, in 2000 the number of registered marriages was at about 90 thousand and in 2004 jumped to 115 thousand couples in Kazakhstan. In the capital of the country, Astana city, the registration staff work every day: even at the weekend people go to the registration ceremony (Info-tses). Having a

baby without a child's father is an important event for woman, however, having baby in a nuclear family, in the registered marriage is more important for a child and child's future.

Finally, it is important to mention, that due to the lack of the data, the analytical calculation in the given research was limited and demands further research based on the results of some survey or other statistical activities.

8. Reference and internet source

AGENCY OF STATISTICS OF THE REPUBLIC OF KAZAKHSTAN. 2008c. Territorial organs of the Agency of Statistics of the Republic of Kazakhstan. Accessed at <<http://www.eng.stat.kz/about/Pages/struct.aspx>> on 13 February, 2010.

ALEXEENKO, N.B., ALEXEENKO, A.N. 1999. Население Казахстана за 100 лет (1897-1997 гг.). Усть-Каменогорск.

AGADJANIAN, V. 1999. Post-Soviet Demographic Paradoxes: Ethnic Differences in Marriage and Fertility in Kazakhstan Author(s): Source: Sociological Forum, Vol. 14, No. 3 (Sep., 1999), pp. 425-446 Published by: Springer Stable URL: http://www.jstor.org/stable/684873 Accessed: 04/01/2010 11:56.

AGADJANIAN, V., DOMMARAJU, P., GLICK, J.E. 2007. Reproduction in Upheaval: Crisis, Ethnicity, and Fertility in Kazakhstan.

AGADJANIAN, V., GLICK, J.E. 2008. Reproduction in upheaval: Ethnic-specific fertility responses to societal turbulence in Kazakhstan; Premchand Dommaraju; Arizona State University. Assessed in http://www.informaworld.com/smpp/title~content=t713689546 on 29 June 2009.

AGYBAEVA, G.A. 2006. Репродуктивные установки женщин Восточно-Казахстансой области. Усть-Каменогорск, Медиа-Альянс.

ALEXEENKO, A.N. 2005. Казахстанский путь модернизации: этнодемографический аспект // Демоскоп № 183 – 184 20 декабря 2004 - 9 января, 2005

ANDERSSON, G. 2001. Fertility developments in Norway and Sweden since the early 1960s MPIDR WORKING PAPER WP 2001-020 JULY 2001.

BEKHOZHAEVA, A.K.2004. Региональные тенденции демографического развития Республики Казахстан за 1990-2002 годы. Опубликовано в журнале "Вопросы статистики" №11, 2004, с. 69-73.

BEKMAHANOVA, N.E. 1986. Многонациональное население Казахстана и Киргизии в эпоху капитализма (60-ые годы XIX в. – 1917 г.). М. 1986.

BELOVA, V.A., DARSKII L.E. 1972. Статистика мнений в изучении рождаемости. Москва.

BILLARI, F.C., KOHLER, H.P., ANDERSSON, G., LUNDSTRÖM, H. 2007. Approaching the Limit: Long-Term Trends in Late and Very Late Fertility. Population and Development Review 33(1):149-170.

BILLARI, F.C., PHILIPOV D. 2004. Education and the Transition to Motherhood: a Comparative Analysis of Western Europe. in European Demographic Research Papers Series. Vienna: Vienna Institute of Demography.

BILLARI, F.C. 2008. Lowest-Low Fertility in Europe: Exploring the Causes and Finding Some Surprises. The Japanese Journal of Population, Vol.6, No.1 (March 2008). Assessed on 27 April, 2010 from http://www.ipss.go.jp/webj-ad/webJournal.files/population/2008_4/01billari.pdf.

BONDARSKAYA G.A. 1994. Ethnic-Territorial Differences in Marital Fertility: A1985 Survey // Demographic Trends and Patterns in the Soviet Union Before 1991 / Ed. by Lutz W., Scherbov S., Volkov A. L- N.-Y.: Routledge.

BONDARSKAYA, G.A. 1977. Рождаемость в СССР. Этнодемографический аспект. Москва.

BONDARSKAYA, G.A. 1985. Рождаемость у народов СССР // Сто наций и народностей. Этнодемографическое развитие СССР. Москва.

BONDARSKAYA, G.A. 1999. Изменение демографического поведения российских семей за 100 лет. МИР РОССИИ. N4

BORISOV, V.A. 1976. Перспективы Рождаемости. Москва.

BRUIJIN de, BART J. 1999. Foundations of Demographic Theory. Choice, Process, Context. Amsterdam.

CHARLES, M.B., SEITENOVA, A.S. PIE 2005. Discussion Paper Series March. Fertility and Marriage in Kazakhstan's transition period: Implications for security policy.

CHILD SAFETY SERVICES - http://www.childsafety.qld.gov.au

CHRISTIN, L. 2009. Non-Marital Cohabitation in Italy. Rostock.

DARSKII, L.E., ILLINA, I.P. 2000. Брачность в России. Москва.

DEMOGRAPHIC RESEARCH VOLUME 19, ARTICLE 25, PAGES 973-1018 PUBLISHED 01 JULY 2008. Research Article. Slovakia: Fertility between tradition and modernity Potančoková M., Vaňo, B., Pilinská, V., Jurčová, D. Accessed at http://www.demographic-research.org/Volumes/Vol19/25/ on November 10, 2009.

DYUSSUPOVA, S. 2010. Recent changes in extramarital fertility in Kazakhstan. 2nd Demographic Conference of Young Demographers, Prague. 17 Feb 2010.

ELZINGA, C.H., LIEFBROER, A.C. 2007. De-standardization of Family-Life Trajectories of Young Adults: A Cross-National Comparison Using Sequence Analysis. / Published online: 11 September 2007_ Springer Science+Business Media B.V. 2007 Assessed on 24 of March, 2010.

ESIMOVA, A.B. 2006. Политика в области рождаемости в республике Казахстан // Демоскоп № 235 – 236 20 февраля - 5 марта, 2006.

EUROPEAN POPULATION CONFERENCE, 26-30 August, 2003. Population of Central and Opportunities. Statistical Publishing Establishment. Warsaw.

FREJKA, T. AND SARDON, J. P. (2006). First birth trends in developed countries: Persisting parenthood postponement. Demographic Research 15(6): 147-180. Assessed in January, 2010, from http://www.demographic-research.org/cgi-bin/pages.plx?pageid=52&link=cgi&ref=479&cm=0

INFO-TSES, KAZAKHSTANI NEWSPAPERS, Assessed on 2 May, 2010 from http://www.info-tses.kz/red/article.php?article=12159.

GARENNE, M. MICHEL Fertility Changes in Sub-Saharan Africa French Institute of Research for Development (IRD) Institute Pasteur, Paris

HAJNAL, J. (1965). "European marriage patterns in perspective", in GLASS, D.V. et. EVERSLEY, D.E.C. (ed.), Population in History, Londres, Edward Arnold: 101-143.

HENRY P.DAVID. 1999. From abortion to contraception. A Resource to Public Policies and Reproductive Behavior in Central and Eastern Europe from 1917 to the Present. Assessed on 28 of February, 2010 from http://www.greenwood.com/catalog/GR0587.aspx

KAA VAN DE, D.J. The Idea of a Second Demographic Transition in Industrialized Countries Paper presented at the Sixth Welfare Policy Seminar of the National Institute of Population and Social Security, Tokyo, Japan, 29 January 2002.

KARATEPE, Z.S. Effects of Economic Crisis on Marital Fertility in Turkey Master's thesis Spring 2009 Supervisor: Tommy Bengtsson.

KOHLER, H.P., KOHLER, I. 2002. Fertility decline in Russia in the early and mid-1990s: The role of economic uncertainty and labour market crises." European Journal of Population 18(3):23-262.

KUIJSTEN, A. 1995. Recent Trends in Household and Family Structures in Eurape: An Overview. Amsterdam. Household demography and household modelling (The Springer Series on Demographic Methods and Population Analysis) by Evert van Imhoff, Anton Kuijsten, Pieter Hooimeijer, and Leo J.G. van Wissen (Hardcover - 31 Oct 1995) p.53-84.

MASANOV, N.E., ABYLHOZHYN, Z.B., EROFEEVA, I.V. et al. 2001. История Казахстана: народы и культуры : учебное пособие - Алматы: Дайк-Пресс.

MATERIALS FROM THE CONFERENCE. 1999. Международная научно-практическая конференция. Этнодемографические процессы в Казахстане и сопредельных территориях. 14-15 декабря, 1999. СТОЛЯРОВА, Л.В. Гражданская и этническая идентичность в Казахстане: общее и особенное. Стр.3-7.

MATERIALS FROM THE CONFERENCE. 2003. Международная научно-практическая конференция. Этнодемографические процессы в Казахстане и сопредельных территориях. 20-21 октября, 2003. АЛЕКСЕЕНКО, А.Н. Стратегия демографического развития Республики Казахстан: региональный аспект. Стр.33-40.

MATERIALS FROM THE CONFERENCE. 2003. Международная научно-практическая конференция. Этнодемографические процессы в Казахстане и сопредельных

территориях. 20-21 октября, 2003. АЛЕКСЕЕНКО, Н.И. Демографические последствия первой мировой войны в Казахстане. Стр.41-45.

MOFFITT, R.A. 1998. Welfare, the Family and Reproductive Behavior (research perspectives). Washington.

NEWSPAPERS. ARTICLE. IMMIGRATION FROM CENTRAL ASIA. Assessed on 12 January, 2010 from http://www.kazaag.kz/showarticle2.php?id=17034. Иммиграция из стран Центральной Азии: преимущества и угрозы.

POPULATION BULLETIN OF THE UNITED NATIONS. 1999. Bellow replacement Fertility. Special Issue Nos40/41. Fertility Trends among low fertility countries. Population Division. p. 35-125.

PENG YU, 2006. Higher Education, the Bane of Fertility? An investigation with the HILDA Survey DISCUSSION PAPER NO. 512 January.

RYCHTAŘÍKOVÁ, J. 2007. EU demographics: Living more and reproducing less Department of Demography and Geodemography, Faculty of Science, Charles University in Prague. Pharmaceuticals Policy and Law. Volume 9, Volume 9/2007. Assessed on 28 of March from http://iospress.metapress.com/content/7uathgp47rl14g74/fulltext.pdf

RYCHTAŘÍKOVÁ, J. 1999. Is Eastern Europe experiencing a second demographic transition? ACTA Universitas Carolinae, Geographica, N. 1, p.19-44.

SOBOLEVA, S. 1980. Migration and settlement: Soviet Union. Institute of Economics and Industrial Engineering of the USSR Academy of Sciences, Novosibirsk.

SOBOTKA, T. 2004. Postponement of Childbearing and Low Fertility in Europe.

SOBOTKA, T., ŠŤASTNÁ, A., ZEMAN, K., HAMPLOVÁ, D., KANTOROVÁ, V. 2008. Czech Republic: A rapid transformation of fertility and family behavior after the collapse of state socialism. Demographic Research, July 2008.

TAVADOV, G.T. 2007. Этнология. Современный словарь-справочник - Москва: Диалог культур.

VISHNEVSKII, A.G. 1982. Воспроизводство населения и общество. Москва.

ZAHAROV, S.V., IVANOVA, E.I. 1997. Рождаемость и брачность в России. Москва.

WWW.AKORDA.RU – Official Site of the President of the Republic of Kazakhstan.

WWW.MINJUST.KZ/RU/ART/«КАК_ЗАРЕГИСТРИРОВАТЬ_РОЖДЕНИЕ» - Official site of the Ministry of Justice of Kazakhstan.

WWW.WORLDBANK.ORG – International Data Catalog.

HTTP://WWW.CENSUS.GOV – The United States Census Bureau.

9. APPENDIXES

Appendix 1 – Age Specific Fertility Rates of marital fertility according to ethnicity in Kazakhstan, 1999-2006

All ethnicities								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,10039	0,08846	0,07864	0,06837	0,07196	0,07051	0,06904	0,07404
20-24	0,50647	0,49825	0,47664	0,47011	0,50384	0,52635	0,52142	0,55352
25-29	0,40240	0,41824	0,41526	0,42817	0,47310	0,51479	0,52507	0,56679
30-34	0,24183	0,25833	0,26448	0,27814	0,30443	0,34299	0,34725	0,38192
35-39	0,10362	0,11111	0,11928	0,13104	0,15159	0,17494	0,18256	0,20501
40-44	0,02117	0,02290	0,02377	0,02625	0,03057	0,03718	0,04064	0,04679
45+	0,00222	0,00229	0,00194	0,00153	0,00194	0,00189	0,00196	0,00212
Kazakhs								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,08739	0,07590	0,06814	0,05687	0,06090	0,05827	0,05765	0,06376
20-24	0,57667	0,57259	0,54466	0,53319	0,57003	0,59383	0,58889	0,62802
25-29	0,48990	0,51090	0,50756	0,51831	0,57976	0,63226	0,64327	0,70084
30-34	0,30463	0,32737	0,33328	0,34817	0,38094	0,43217	0,43883	0,48770
35-39	0,14788	0,15401	0,16218	0,17499	0,19873	0,22976	0,23891	0,27061
40-44	0,03403	0,03619	0,03699	0,03937	0,04367	0,05398	0,05653	0,06561
45+	0,00425	0,00443	0,00327	0,00255	0,00320	0,00318	0,00305	0,00336
Russians								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,10194	0,09291	0,07859	0,07058	0,07491	0,07448	0,07296	0,07608
20-24	0,32326	0,30573	0,29517	0,28924	0,31072	0,30902	0,30053	0,31699
25-29	0,20560	0,21511	0,21623	0,22643	0,23724	0,25113	0,26103	0,26946
30-34	0,09928	0,10148	0,10634	0,11827	0,13226	0,14503	0,15219	0,15728
35-39	0,03271	0,03429	0,03730	0,03901	0,04660	0,05586	0,05726	0,06327
40-44	0,00650	0,00652	0,00607	0,00648	0,00864	0,00845	0,00969	0,01088
45+	0,00054	0,00026	0,00036	0,00034	0,00042	0,00025	0,00036	0,00034
Ukrainians								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,14823	0,13045	0,12362	0,10053	0,10001	0,10454	0,09444	0,10253
20-24	0,44167	0,42911	0,42170	0,41206	0,40432	0,43275	0,39699	0,40738
25-29	0,29026	0,29930	0,29364	0,31840	0,34114	0,33798	0,34099	0,36605
30-34	0,13779	0,13831	0,14827	0,15000	0,18522	0,19187	0,19190	0,21499
35-39	0,04339	0,04635	0,04786	0,04950	0,06481	0,06542	0,07643	0,08153
40-44	0,00850	0,00769	0,00918	0,01152	0,01309	0,01173	0,01048	0,01234
45+	0,00051	0,00025	0,00103	0,00027	0,00080	0,00052	0,00025	0,00025
Uzbeks								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,16367	0,13535	0,12257	0,11942	0,11862	0,11116	0,10419	0,11339
20-24	1,13183	1,02013	1,00151	0,97357	1,06041	1,14640	1,08609	1,09860

25-29	0,79853	0,76255	0,73923	0,75657	0,81268	0,87845	0,83876	0,90219
30-34	0,45272	0,41337	0,47156	0,44352	0,47176	0,52111	0,50225	0,52529
35-39	0,15047	0,17354	0,18374	0,17603	0,20001	0,21946	0,23387	0,24852
40-44	0,02909	0,03395	0,02698	0,03752	0,03138	0,04196	0,06085	0,04866
45+	0,00327	0,00427	0,00238	0,00104	0,00194	0,00204	0,00404	0,00335
Others								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,14225	0,12752	0,12009	0,11335	0,11667	0,12312	0,12193	0,12389
20-24	0,46588	0,47369	0,44139	0,45674	0,48672	0,53367	0,54200	0,56264
25-29	0,33713	0,35423	0,34178	0,36177	0,38955	0,43453	0,44399	0,45900
30-34	0,18994	0,21209	0,20162	0,22659	0,24439	0,27995	0,27088	0,29957
35-39	0,07797	0,08247	0,08307	0,10225	0,12008	0,12471	0,12939	0,13748
40-44	0,01444	0,01501	0,01653	0,01852	0,02613	0,02379	0,02784	0,02670
45+	0,00110	0,00156	0,00215	0,00166	0,00155	0,00150	0,00157	0,00138

Appendix 2 – Age Specific Fertility Rates of extramarital fertility according to ethnicity in Kazakhstan, 1999-2006

All ethnicities								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,04872	0,04791	0,04962	0,04677	0,04306	0,04379	0,04178	0,03956
20-24	0,09207	0,09719	0,10906	0,11634	0,11097	0,11274	0,10738	0,09801
25-29	0,05183	0,05709	0,06550	0,07206	0,07017	0,07713	0,07598	0,07143
30-34	0,02969	0,03292	0,03807	0,04179	0,04017	0,04585	0,04584	0,04619
35-39	0,01491	0,01668	0,01862	0,02141	0,02103	0,02329	0,02435	0,02569
40-44	0,00368	0,00380	0,00441	0,00512	0,00530	0,00535	0,00630	0,00612
45+	0,00031	0,00048	0,00045	0,00027	0,00038	0,00040	0,00036	0,00039
Kazakhs								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,03924	0,03796	0,03910	0,03611	0,03287	0,03324	0,03271	0,03063
20-24	0,09336	0,09731	0,11029	0,11644	0,10504	0,10964	0,10484	0,09410
25-29	0,05200	0,05753	0,06558	0,07235	0,06813	0,07501	0,07437	0,07010
30-34	0,03114	0,03449	0,04006	0,04331	0,04064	0,04630	0,04731	0,04678
35-39	0,01729	0,01905	0,02085	0,02392	0,02241	0,02470	0,02745	0,02793
40-44	0,00442	0,00453	0,00558	0,00627	0,00613	0,00617	0,00717	0,00709
45+	0,00058	0,00070	0,00065	0,00039	0,00053	0,00053	0,00049	0,00050
Russians								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,06148	0,06295	0,06564	0,06208	0,05833	0,06189	0,05654	0,05508
20-24	0,08756	0,09213	0,10353	0,11287	0,11530	0,11131	0,10316	0,09491
25-29	0,05114	0,05463	0,06189	0,07035	0,07016	0,07483	0,07158	0,06829
30-34	0,02571	0,02850	0,03201	0,03685	0,03716	0,04153	0,03972	0,03989
35-39	0,01029	0,01198	0,01462	0,01617	0,01620	0,01899	0,01655	0,01849
40-44	0,00257	0,00280	0,00268	0,00346	0,00331	0,00331	0,00383	0,00399
45+	0,00008	0,00016	0,00009	0,00011	0,00022	0,00025	0,00014	0,00020

Ukrainians								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,08258	0,07551	0,08274	0,06762	0,07403	0,06824	0,07324	0,06562
20-24	0,10012	0,11591	0,12508	0,12984	0,12842	0,12758	0,11983	0,12047
25-29	0,06153	0,06561	0,07819	0,07554	0,08162	0,09457	0,08740	0,08188
30-34	0,02883	0,03500	0,04120	0,04018	0,04558	0,04838	0,04483	0,05261
35-39	0,01277	0,01718	0,01389	0,01759	0,02121	0,02282	0,01857	0,02337
40-44	0,00281	0,00210	0,00190	0,00384	0,00447	0,00520	0,00570	0,00356
45+	0,00026	0,00025	0,00027	0,00000	0,00025	0,00025	0,00000	0,00000
Uzbeks								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,02202	0,02144	0,02403	0,03435	0,02737	0,03039	0,02402	0,02919
20-24	0,04997	0,06302	0,07127	0,09741	0,09294	0,09926	0,10214	0,09371
25-29	0,02675	0,03530	0,03813	0,05326	0,06199	0,06446	0,07238	0,06800
30-34	0,01875	0,02036	0,02461	0,03397	0,02870	0,03596	0,03819	0,04576
35-39	0,01032	0,01227	0,01287	0,01774	0,01514	0,01943	0,01793	0,02375
40-44	0,00089	0,00311	0,00618	0,00349	0,00485	0,00401	0,00564	0,00629
45+	0,00000	0,00117	0,00070	0,00000	0,00047	0,00000	0,00040	0,00000
Others								
age/year	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
16-19	0,06673	0,06630	0,07020	0,07177	0,06640	0,06504	0,06473	0,06128
20-24	0,10607	0,11531	0,12377	0,12779	0,13825	0,13807	0,13521	0,13009
25-29	0,05680	0,06513	0,07970	0,07977	0,08331	0,09738	0,09780	0,08781
30-34	0,03398	0,03704	0,04361	0,04753	0,04695	0,05725	0,05586	0,05887
35-39	0,01701	0,01683	0,01865	0,02131	0,02575	0,02606	0,02650	0,02984
40-44	0,00468	0,00415	0,00447	0,00472	0,00660	0,00657	0,00782	0,00609
45+	0,00021	0,00075	0,00089	0,00039	0,00029	0,00038	0,00061	0,00069

Appendix 3 – Cohort perspective

Year/ages	**16-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45+**
1999	1980-83	1975-79	1970-74	1965-69	1960-64	1955-59	>1954
2000	1981-84	1976-80	1971-75	1966-70	1961-65	1956-60	>1955
2001	1982-85	1977-81	1972-76	1967-71	1962-66	1957-61	>1956
2002	1983-86	1978-82	1973-77	1968-72	1963-67	1958-62	>1957
2003	1984-87	1979-83	1974-78	1969-73	1964-68	1959-63	>1958
2004	1985-88	1980-84	1975-79	1970-74	1965-69	1960-64	>1959
2005	1986-89	1981-85	1976-80	1971-75	1966-70	1961-65	>1960
2006	1987-90	1982-86	1977-81	1972-76	1967-71	1962-66	>1961

Appendix 4 – The statement about registration of birth, Kazakhstan

Туу тіркеу туралы арыз
Заявление о регистрации рождения

Баланың тегі Фамилия ребенка	
Баланың аты Имя ребенка	
Баланың әкесінің аты Отчество ребенка	
Туған күні Дата рождения	
Туған жері Место рождения	
Неше бала туды: біреу, егіз, үшеу Сколько родилось детей: один, двойня, тройня	
Жаңа туған баланы қосқанда шешесінің баласы Который по счету ребенок родился у матери, включая новорожденного	
ӘКЕСІ ТУРАЛЫ МӘЛІМЕТ СВЕДЕНИЯ ОБ ОТЦЕ	**ШЕШЕСІ ТУРАЛЫ МӘЛІМЕТ** СВЕДЕНИЯ О МАТЕРИ
Тегі Фамилия	
Аты Имя	
Әкесінің аты Отчество	
Туған уақыты Время рождения	
Жасы _____**толды** Возраст исполнилось _____ лет	**Жасы** _____**толды** Возраст исполнилось _____ лет
Ұлты Национальность	
Тұрақты мекені Место постоянного жительства	
Кім болып, қайда істейді Где и кем работает	
Білімі Образование	
Некені тіркеу туралы куәлік, қай АХАЖ бөлімімен берілген **Жазу номері** _____ **«____» _____ 200__ ж.** Свидетельство о заключении брака, каким отделом ЗАГС выдано Запись № _____ «____» _____ 200__ г.	
Төлқұжаттың № № паспорта уд/личности	
Өтінушінің тегі, аты, әкесінің аты, мекен-жайы және қолы Фамилия, имя, отчество, адрес и подпись заявителя	

Appendix 5 – The statement about registration of marriage, Kazakhstan

1

заявление принято _____
и зарегистрировано в журнале за № _
регистрация назначена на
_____ г. в _____ час. _____ мин.
(бөлімінің атауы)
_____
начальник рай (гор) отделом ЗАГС
_____

брак зарегистрирован
в _____
_____
(наименование рай (гор)
_____
отдела ЗАГС)
актовая запись № _____

ЗАЯВЛЕНИЕ О ВСТУПЛЕНИИ В БРАК

		ОН	ОНА
1.	Фамилия		
2.	Имя		
3.	Отчество		
4.	Время рождения, возраст	«___»_____ г. исполнилось ___ лет	«___» _____ г. исполнилось _лет
5.	Гражданство		
6.	Место рождения (город, селение, район, область, край, республика)		
7.	Национальность		
8.	Образование		
9.	Где и кем работает		
10.	Семейное положение: в браке не состоял (ла), вдов (а), разведён (а)		
11.	Сведения об общих детях		
12.	Место постоянного жительства		
13.	С какого года		
14.	В какой по счету брак вступает		
15.	Документы, удостоверяющие личность (номер, когда и кем выдан)		

Препятствий к заключению брака не имеется.
После регистрации брака желаем носить фамилии

Appendix 6 – The copy of the certificate of birth, Kazakhstan

Appendix 7 – The copy of the certificate of marriage, Kazakhstan